Access DB# 107347

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: HOA VAN LE Examiner #: 60626 Date: 02 Dec. 2003
Art Unit: 1752 Phone Number 30 8-2295 Serial Number: 10/617,647
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): Please see the attachment

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please search for polymers as disclosed in claim 1 for use in a photographic art.

Thank you

WEST

Help | Logout | Interrupt

Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences | Cases

Search Results -

Terms	Documents
(develop? or bleach? or fix?) same (poly? adj5 (?thiol or ?disulfide or ?mercato or ?sulfate or ?sulfone or ?sulfonic or sulfonate))	0

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L2

Refine Search

Recall Text | Clear

Search History

DATE: Tuesday, December 02, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L2	(develop? or bleach? or fix?) same (poly? adj5 (?thiol or ?disulfide or ?mercato or ?sulfate or ?sulfone or ?sulfonic or sulfonate))	0	L2
L1	((develop? or bleach? or fix?) adj solution) same (poly? adj5 (?thiol or ?disulfide or ?mercato or ?sulfate or ?sulfone or ?sulfonic or sulfonate))	0	L1

END OF SEARCH HISTORY

STIC Search Report
EIC 1700

Scientific & Technical Information Center
USPTO

STIC Database Tracking Number: 107347

TO: Hoa V Le **Location:** **Art Unit : 1752** **November 4, 2003** **Case Serial Number: 10/617647**	**From: Barba Koroma** **Location: EIC 1700** **CP3/4-3D62** **Phone: 305-3542** **barba.koroma@uspto.gov**

Search Notes

Examiner V Le,
Please find attached results of the search you requested. Note that the title of hits have been listed to help you go through the results set quickly. This is followed by a detailed printout of records.

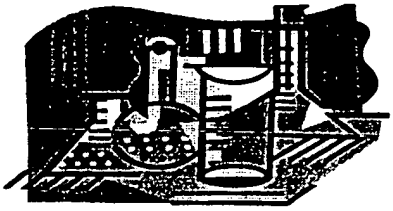
Various components of the claimed invention as spelt out in the search request and in the claims were searched in REGISTRY and CAPLUS databases.

Please let me know if you have any questions.
Thanks.

Please do not copy

Hoa Van Le

Search and Information Resources Administration



EIC 1700 / LUTRELLE F. PARKER LAW LIBRARY

Scientific and Technical Information Center

Search Results Feedback Form

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact the searcher whose name is circled below.

Kathleen Fuller 308-4290 John Calve 308-4139

Barba Koroma 305-3542 Eric Linnell 308-4143

All searchers are located in the library in CP3/4 3D62

STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher or contact*:

Kathleen Fuller, EIC 1700 Team Leader
308-4290, CP3/4-3D62

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1713*
- *Relevant prior art* ***found****, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art* ***not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62

Search and Information Resources Administration

```
=> file reg
FILE 'REGISTRY' ENTERED AT 13:27:14 ON 04 NOV 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:     3 NOV 2003  HIGHEST RN 612478-18-9
DICTIONARY FILE UPDATES:    3 NOV 2003  HIGHEST RN 612478-18-9

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> file capls
'CAPLS' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'REGISTRY'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.

=> file caplus
FILE 'CAPLUS' ENTERED AT 13:27:22 ON 04 NOV 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 4 Nov 2003  VOL 139 ISS 19
FILE LAST UPDATED: 3 Nov 2003  (20031103/ED)



KOROMA  EIC1700
```

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> d que
L1              STR

CH2:C
1  2

NODE ATTRIBUTES:
CONNECT IS M2  RC AT   2
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   2

STEREO ATTRIBUTES: NONE
L2              STR

S 1

NODE ATTRIBUTES:
CONNECT IS M1  RC AT   1
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   1

STEREO ATTRIBUTES: NONE
L3              SCR 2043
L4   (     45701)SEA FILE=REGISTRY SSS FUL L3 AND L1 AND L2
L5   (     31448)SEA FILE=CAPLUS ABB=ON  PLU=ON  L4
L6   (    208531)SEA FILE=CAPLUS ABB=ON  PLU=ON  ?PHOTOGRAPH?
L7   (     27353)SEA FILE=CAPLUS ABB=ON  PLU=ON  SILVER HALIDE AND L6
L8   (    326404)SEA FILE=CAPLUS ABB=ON  PLU=ON  74?/CC
L9   (    328201)SEA FILE=CAPLUS ABB=ON  PLU=ON  L7 OR L8
L10  (      5274)SEA FILE=CAPLUS ABB=ON  PLU=ON  L5 AND L9
L11  (       355)SEA FILE=CAPLUS ABB=ON  PLU=ON  L10 AND (PROCESS? OR DEVELOP?)(
                 4A)SOLU?
L12  (       246)SEA FILE=CAPLUS ABB=ON  PLU=ON  L11 AND (?ACID? OR ?SULFATE?
                 OR ?SULPHATE? OR ?PHOSPHATE?)
L13  (        66)SEA FILE=CAPLUS ABB=ON  PLU=ON  L12 AND (SILVER OR AG)
L14  (        64)SEA FILE=CAPLUS ABB=ON  PLU=ON  L13 AND ?PHOTO?
L15           61 SEA FILE=CAPLUS ABB=ON  PLU=ON  L14 AND (SOLUTION OR AQ OR
                 AQUEOUS OR LIQUID)
```

=> d ti 1-61

L15 ANSWER 1 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Protective overcoat for **photographic** elements

L15 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Protective overcoat for **photographic** elements

L15 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photographic** elements coated on transparent support with reflective protective overcoat

L15 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing **silver halide photographic** films using developer containing ascorbic **acid** derivative and **photographic** film containing fluoro surfactant

L15 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Laser-sensitive **silver halide photographic** material and its processing

L15 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Heat-**developable photographic** material containing water-**soluble** polymer-based thickener for improved joint seam

L15 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Protective epoxy overcoat that resists fingerprints, stains and spills for **photographic** elements

L15 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Black-and-white **silver halide photographic** material containing polymer latex and hydrazine and its processing

L15 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Protective overcoat comprising interpenetrating network for **photographic** elements

L15 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Overcoat for reticulation control in **photographic** elements

L15 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Protective overcoat for **photographic** elements

L15 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic photosensitive** material and processing thereof

L15 ANSWER 13 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI A correcting agent for a **silver** imaged lithographic printing plates

L15 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide** material for optical memory device with luminescent reading and method for treatment thereof

L15 ANSWER 15 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Processing of tetrazolium-containing **silver halide photographic** material with mercapto compound-containing developer to improve characteristic and dot quality

L15 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** material containing hydrazine and gelatin-interacting compound, its process and the image-forming method

L15 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** material and image formation using it

L15 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** material containing a hydrazine and a development inhibitor releaser and its processing

L15 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Imaging element capable of providing in single layer image and independent magnetic record

L15 ANSWER 20 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing **silver halide photographic** material containing a polyamide with a reductone-containing developer to improve neutral black tone

L15 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Processing solution** for **silver** salt diffusion transfer lithographic plate

L15 ANSWER 22 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photopolymerizable** compositions and their cured products

L15 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** materials and processing thereof

L15 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** materials with high sensitivity in IR region

L15 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** materials with high sensitivity in red light regions

L15 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Rapid processing of **silver halide** black-and-white **photographic** material using fixer containing nonionic surfactant to prevent **silver** stain

L15 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing **silver halide** **photographic** material

L15 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing **silver halide** color **photographic** material

L15 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing of **silver halide** color **photographic** material

L15 ANSWER 30 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for continuous processing **silver halide** color **photographic** material by color developer containing hydroxylamine derivative

L15 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Rapid development - processing of **silver halide** **photographic** materials

L15 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Rapid color **photographic** development using developer containing poly(styrenesulfonic **acid**) derivative

L15 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Processing of **silver halide** color **photographic** material

L15 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Processing of **silver halide** color **photographic** material

L15 ANSWER 35 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide** color **photographic** material with stable color rendition and color images

L15 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing **silver halide** color **photographic** material

L15 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Processing of **silver halide** color **photographic** material with improved decoloring and cyan stain

L15 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Processing of **silver halide** color **photographic** materials

L15 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Method for processing **silver halide** color **photographic** light-sensitive materials with sulfinic **acid** -containing **solution** for stain-free images

L15 ANSWER 40 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Color **photographic** image formation by rapid processing

L15 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Color **photographic** processing method

L15 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photosensitive** materials and their reducing treatment

L15 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide** color **photographic** materials for processing without water washing

L15 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photographic silver halide** recording material

L15 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver halide photographic** material for **photomechanical** process and method for its reduction processing

L15 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Radiographic image forming

L15 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photosensitive silver halide photographic** material

L15 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Hydrazide compositions and **photographic** materials containing them

L15 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Silver** complex diffusion-transfer **photographic photosensitive** material

L15 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Graft polymers as layers for controlling diffusion in **photographic** products

L15 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Graft polymer as a layer for controlling diffusion in **photographic** products

L15 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Amide compounds and polymers thereof useful in **photographic** materials

L15 ANSWER 53 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photographic** elements having hydrophilic colloid layers containing compounds having activator precursors and hydrophobic developing agents uniformly loaded in latex polymer particles

L15 ANSWER 54 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Pyrazoloneazo dye-releasing coupler for diffusion-transfer **photographic** materials

L15 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Synthetic **silver halide** emulsion binder

L15 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Polymers containing resorcinol groups for use in **photographic** elements

L15 ANSWER 57 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Imaging systems containing optically active polysulfoxide groups

L15 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photographic** materials containing mordants

L15 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photographic** film unit for color **photographs**

L15 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI Mordant compositions for use in **photographic** elements

L15 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Photographic** emulsions for rapid processing

=> d ibib abs hitstr ind total l61
L61 NOT FOUND
The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d ibib abs hitstr ind total l15

L15 ANSWER 1 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:356069 CAPLUS
DOCUMENT NUMBER: 138:360358
TITLE: Protective overcoat for **photographic** elements
INVENTOR(S): Yau, Hwei-ling; O'Connor, Kevin Michael; Flood, Elmer Charles; Decker, David E.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1308777	A1	20030507	EP 2002-79441	20021024
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2003162138	A1	20030828	US 2001-7359	20011105
JP 2003149768	A2	20030521	JP 2002-321120	20021105

PRIORITY APPLN. INFO.: US 2001-7359 A 20011105

AB The present invention is a **photog.** element which includes a support, at least one **silver-halide** emulsion layer superposed on the support and a **processing-soln** .-permeable overcoat overlying the **silver-halide** emulsion layer that becomes water-resistant in the final product, without requiring lamination or fusing. The coating composition comprises a blocked copolymer of ethylene oxide and propylene oxide which has been found to improve wet durability, prevent the retention of iron, and improve the conversion of the overcoat to a water-resistant layer during processing. The present invention is also directed to a method of making a **photog.** print involving developing the **photog.** element.

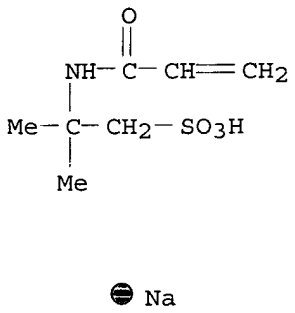
IT **519175-94-1P**, Butyl methacrylate-ethyl acrylate-sodium 2-sulfo-1,1-dimethylethyl acrylamide-vinylidene graft copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(core-shell; protective overcoat for **photog.** elements containing)

RN 519175-94-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 1,1-dichloroethene, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt, graft (9CI) (CA INDEX NAME)

CM 1

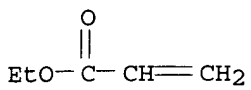
CRN 5165-97-9
CMF C7 H13 N O4 S . Na



Na

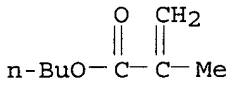
CM 2

CRN 140-88-5
CMF C5 H8 O2



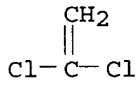
CM 3

CRN 97-88-1
CMF C8 H14 O2



CM 4

CRN 75-35-4
CMF C2 H2 Cl2



IC ICM G03C001-76
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST protective overcoat **photog** emulsion
IT Coating materials
Photographic emulsions
(protective overcoat for **photog.** elements)
IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(protective overcoat for **photog.** elements containing)
IT **519175-94-1P**, Butyl methacrylate-ethyl acrylate-sodium 2-sulfo-1,1-dimethylethyl acrylamide-vinylidene graft copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell; protective overcoat for **photog.** elements containing)
IT 30394-85-5P, Ethyl acrylate-methacrylic **acid**-vinylidene chloride copolymer 479201-21-3P, Bisphenol A-1,4-butanediol-dimethylolpropionic **acid**-isophorone diisocyanate-Tone0260 copolymer 519175-93-0P, Bisphenol A-1,4-butanediol-dimethylolpropionic **acid**-isophorone diisocyanate-PC1733 copolymer 519175-95-2P, Ethyl acrylate-2-hydroxyethyl methacrylate-vinylidene chloride copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(protective overcoat for **photog.** elements containing)
IT 25248-42-4DP, Polycaprolactone, SRU, polyol derivs.; MW=3000
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(protective overcoat for **photog.** elements containing)
IT 106392-12-5, Pluronic F-127 110617-70-4, Tetronic 1307 115965-96-3, Airvol 203
RL: TEM (Technical or engineered material use); USES (Uses)
(protective overcoat for **photog.** elements containing)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:864340 CAPLUS
DOCUMENT NUMBER: 137:360264
TITLE: Protective overcoat for **photographic** elements
INVENTOR(S): Jones, Tamara K.; Lobo, Lloyd A.; Nair, Mridula; O'Connor, Kevin M.; Qiao, Tiecheng A.; Wang, Yongcai; Whitesides, Thomas H.; Yau, Hwei-ling
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 20 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6479222	B1	20021112	US 2000-621267	20000721

PRIORITY APPLN. INFO.: US 2000-621267 20000721
AB The present invention relates to a **photog.** element which includes a support, at least one **silver halide** emulsion layer superposed on the support and a **processing-solution**-permeable protective overcoat overlying the **silver halide** emulsion layer that becomes water-resistant in the final product without lamination or fusing. The present invention is also directed to a method of making a **photog.** print involving developing the **photog.** element.
IT **474901-65-0P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

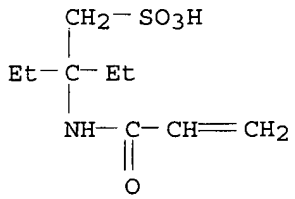
(protective overcoat for **photog.** elements containing)

RN 474901-65-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-ethyl-2-[(1-oxo-2-propenyl)amino]-1-butanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

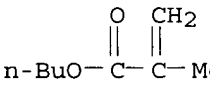
CM 1

CRN 143453-01-4
CMF C9 H17 N O4 S . Na



CM 2

CRN 97-88-1
CMF C8 H14 O2



IC ICM G03C001-76
ICS G03C011-06; G03C011-08

NCL 430350000

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

ST **photog** emulsion protective overcoat

IT Coating materials
Photographic emulsions
(protective overcoat for **photog.** elements)

IT 25068-38-6, Epon 1001F 25135-39-1, Carboset 525 54590-72-6, **AQ** -55
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(protective overcoat for **photog.** elements containing)

IT 25249-59-6P, Acrylic **acid**-acrylonitrile-vinylidene chloride

copolymer 25249-60-9P, Methylacrylate-itaconic **acid**-vinylidene chloride copolymer 26589-42-4P, Ethyl acrylate-itaconic **acid** -vinylidene chloride copolymer 88159-92-6P, Ethyl acrylate-2-hydroxyethyl acrylate-vinylidene chloride copolymer 325787-06-2P, 1,4-Butanediol-diethylene glycol-dimethylolpropionic **acid** -isophorone diisocyanate-Permanol KM 10-1733 copolymer 326474-65-1P, 1,4-Butanediol-dimethylolpropionic **acid**-isophorone diisocyanate-KM 101733 copolymer 445474-87-3P, Millester 9-55-methylene bis(4-cyclohexyl)isocyanate-methyl methacrylate-butyl acrylate-acetoacetoxyethyl methacrylate copolymer **474901-65-0P** 474901-66-1P, Millester 9-55-Desmodur W-methyl methacrylate-butyl acrylate-acetoacetoxyethyl methacrylate copolymer 474901-67-2P, 1,4-Butanediol-bisphenol A-dimethylolpropionic **acid**-isophorone diisocyanate-Permanol KM 10-1733 copolymer 474901-68-3P, 1,4-Butanediol-PS 510-dimethylolpropionic **acid**-isophorone diisocyanate-Permanol KM 10-1733 copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(protective overcoat for **photog.** elements containing)

IT 374627-88-0, Chemcor 260
RL: TEM (Technical or engineered material use); USES (Uses)
(protective overcoat for **photog.** elements containing)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:831894 CAPLUS
DOCUMENT NUMBER: 137:343836
TITLE: **Photographic** elements coated on transparent support with reflective protective overcoat
INVENTOR(S): Donovan, Kevin Michael; Brown, Glenn Monroe; Lobo, Lloyd Anthony
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1253467	A1	20021030	EP 2002-76473	20020415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003077546	A1	20030424	US 2001-844230	20010427
US 6586165	B2	20030701		
JP 2002365766	A2	20021218	JP 2002-126622	20020426

PRIORITY APPLN. INFO.: US 2001-844230 A 20010427

AB The present invention is a **photog.** element which includes, in order, (1) a transparent support, at least one **silver halide** emulsion layer superposed on the support, (2) optionally a

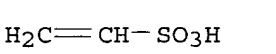
white or diffuse reflective layer, and (3) a **processing-solution**-permeable protective layer on the backside, which protective layer becomes water-resistant in the final product without lamination or fusing. The present invention is also directed to a method of making a **photog.** print involving developing the **photog.** element. The resulting print is viewed through the support, which provides protection against scratches and stains, while the polymeric overcoat provides water and stain protection to the reverse of the print where minor scratches or damage are not critical, since the image is not viewed from this side. Thus, this invention provides for a tough, stain resistant and transparent viewing surface and a stain resistant back side, which is permeable to **processing solns.**

IT **26101-52-0**, Poly(ethylene sulfonic **acid**)
50851-57-5, Poly(styrene sulfonic **acid**)
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** elements coated on transparent support with reflective protective overcoat containing)

RN 26101-52-0 CAPLUS
CN Ethenesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

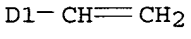
CRN 1184-84-5
CMF C2 H4 O3 S

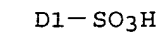


RN 50851-57-5 CAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS





IC ICM G03C001-76

KOROMA EIC1700

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST **photog** film transparent support reflective protective overcoat
IT Coating materials
Photographic films
(**photog.** elements coated on transparent support with reflective protective overcoat)
IT Gingiva
Whey
(**photog.** elements coated on transparent support with reflective protective overcoat containing)
IT Albumins, uses
Gelatins, uses
Polyamides, uses
Polycarbonates, uses
Polyesters, uses
Polyethers, uses
Polyoxyalkylenes, uses
Polyureas
Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** elements coated on transparent support with reflective protective overcoat containing)
IT Anhydrides
RL: TEM (Technical or engineered material use); USES (Uses)
(polymer; **photog.** elements coated on transparent support with reflective protective overcoat containing)
IT Films
(reflective; **photog.** elements coated on transparent support with reflective protective overcoat)
IT 64265-57-2, CX 100
RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinker; **photog.** elements coated on transparent support with reflective protective overcoat containing)
IT 111-46-6DP, Diethylene glycol, polymers with polycarbonate polyol, butanediol, dimethylolpropionic **acid**, and isophorone diisocyanate 4098-71-9DP, Isophorone diisocyanate, polymers with polycarbonate polyol, butanediol, dimethylolpropionic **acid**, and diethylene glycol 4767-03-7DP, Dimethylolpropionic **acid**, polymers with polycarbonate polyol, butanediol, diethylene glycol, and isophorone diisocyanate 25265-75-2DP, Butanediol, polymers with polycarbonate polyol, dimethylolpropionic **acid**, diethylene glycol, and isophorone diisocyanate
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**photog.** elements coated on transparent support with reflective protective overcoat containing)
IT 461676-24-4P, Butyl acrylate-Desmodur W-2,2-dimethylolpropionic **acid**-methyl methacrylate-millester 9-55 copolymer 473988-00-0P, Butyl acrylate-hydrogenated MDI-2,2-dimethylolpropionic **acid** -methyl methacrylate-millester 9-55 copolymer

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**photog.** elements coated on transparent support with reflective protective overcoat containing)

IT 9002-81-7, Poly(oxymethylene) 9002-98-6 9003-01-4, Poly(acrylic **acid**) 9003-05-8 9003-09-2, Poly(vinyl methyl ether) 9003-20-7D, Polyvinyl acetate, hydrolyzed 9004-54-0, Dextrans, uses 9005-25-8, Starch, uses 9005-32-7, Alginic **acid** 9056-77-3, Poly(ethylene glycol methacrylate) 25087-26-7, Poly(methacrylic **acid**) 25249-16-5 25322-68-3, Poly(ethylene oxide) 26099-09-2, Poly(maleic **acid**) **26101-52-0**, Poly(ethylene sulfonic **acid**) **50851-57-5**, Poly(styrene sulfonic **acid**) 54590-72-6, **AQ** 55 115965-96-3, Airvol 203 192948-73-5, Neopac R 9699 474043-82-8, NeoRez A 6092
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** elements coated on transparent support with reflective protective overcoat containing)

IT 13463-67-7, Titanium dioxide, uses 252238-49-6, Ropaque HP-543 285980-72-5, Ropaque OP96
RL: TEM (Technical or engineered material use); USES (Uses)
(reflective material; **photog.** elements coated on transparent support with reflective protective overcoat containing)

IT 474043-83-9, Acusol ASE 60
RL: TEM (Technical or engineered material use); USES (Uses)
(thickener; **photog.** elements coated on transparent support with reflective protective overcoat containing)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:750917 CAPLUS
DOCUMENT NUMBER: 137:286340
TITLE: Method for processing **silver halide photographic** films using developer containing ascorbic **acid** derivative and **photographic** film containing fluoro surfactant
INVENTOR(S): Uchihiro, Shinji
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002287285	A2	20021003	JP 2001-85036	20010323

PRIORITY APPLN. INFO.: JP 2001-85036 20010323

AB The title method for processing **silver halide photog.** films by automated processing apparatus equipped with a developer tank, a fixing tank, and a washing tank uses a **photog.**

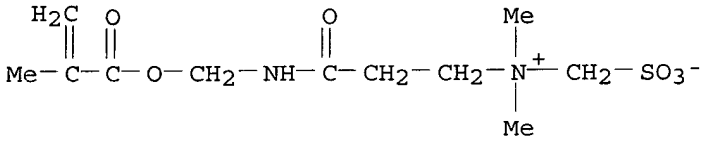
film contains an agent, which has structure Rf-(O-RF')n-L-Xm (RF = F-containing alkyl, aryl, alkenyl; Rf' = f-containing alkylene; n,m ≥1 integer; L = single bond, 2-valent connecting group; X = OH, anionic group, cationic group) or [(RfO)n-(PCF)-CO-Y]k-L-Xm(Rf = C1-4 perfluoroalkyl; n = 1-5 integer; PFC = perfluorocycloalkylene; Y = connecting group containing O or N; X = anionic, cationic, nonionic, or amphoteric group) and a **developer solution** containing ascorbic **acid** derivative for preventing **silver** sludge generation. The method generates decreased amount of **silver** sludge and little soiling on processing films and is suited for automated **photog.** processing.

IT **466672-27-5 467233-90-5 467233-91-6 467233-92-7**
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(fluoro surfactant in **photog.** film; method for processing **silver halide photog.** films)

RN 466672-27-5 CAPLUS
CN 1-Propanaminium, N,N-dimethyl-3-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]-3-oxo-N-(sulfomethyl)-, inner salt, polymer with 2-[2-[(1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl)oxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

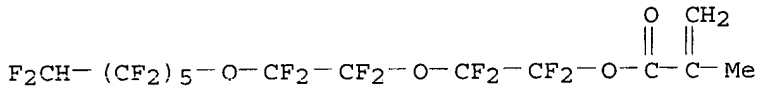
CM 1

CRN 466672-26-4
CMF C11 H20 N2 O6 S



CM 2

CRN 443906-98-7
CMF C14 H6 F20 O4

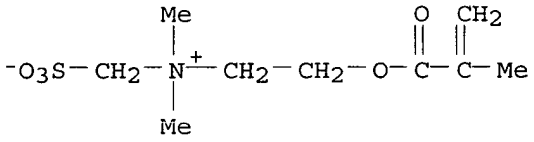


RN 467233-90-5 CAPLUS
CN Ethanaminium, N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-N-(sulfomethyl)-, inner salt, polymer with 3-oxo-3-

[(1,1,2,2,3,3,4,4,5,5,6,6,7,7-tetradecafluoroheptyl)amino]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

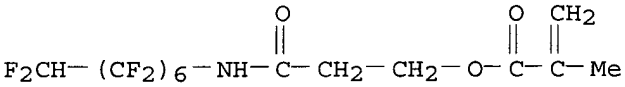
CM 1

CRN 467233-89-2
CMF C9 H17 N O5 S



CM 2

CRN 467233-88-1
CMF C14 H11 F14 N O3

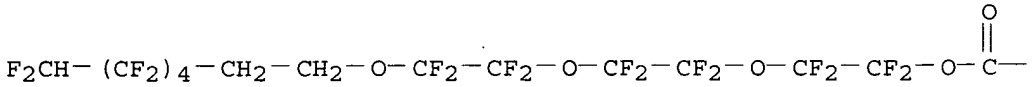


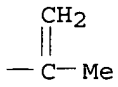
RN 467233-91-6 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[2-[2-[(3,3,4,4,5,5,6,6,7,7-decafluoroheptyl)oxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl ester, polymer with 3-hydroxypropyl 2-propenoate and 3-sulfopropyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 443907-10-6
CMF C17 H10 F22 O5

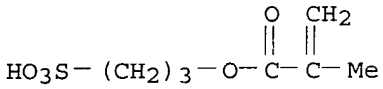
PAGE 1-A





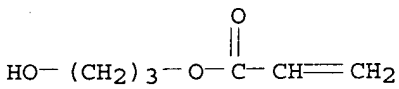
CM 2

CRN 10548-16-0
CMF C7 H12 O5 S . Na



CM 3

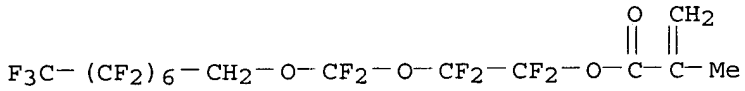
CRN 2761-08-2
CMF C6 H10 O3



RN 467233-92-7 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[difluoro[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl)oxy]methoxy]-1,1,2,2-tetrafluoroethyl ester, polymer with 2-(2-hydroxyethoxy)ethyl 2-methyl-2-propenoate and 2-sulfoethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

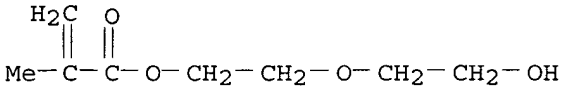
CM 1

CRN 466672-19-5
CMF C15 H7 F21 O4



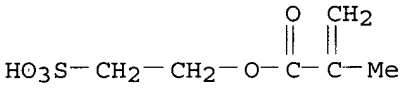
CM 2

CRN 2351-43-1
CMF C8 H14 O4



CM 3

CRN 1804-87-1
CMF C6 H10 O5 S . Na



● Na

IC ICM G03C001-043
ICS G03C001-38; G03C005-26; G03C005-30; G03C005-305
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST processing **silver halide photog** film developer sludge
IT **Photographic** processing
(automated; method for processing **silver halide photog.** films)
IT Surfactants
(fluorosurfactants; method for processing **silver halide photog.** films)
IT **Photographic** developers
Photographic films
(method for processing **silver halide photog** . films)
IT 89-65-6, Isoascorbic **acid**
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(ascorbic **acid** derivative in developer; method for processing **silver halide photog.** films)
IT 439110-47-1 446027-25-4 463311-99-1 466671-95-4 466671-96-5
466671-99-8 466672-01-5 466672-04-8 466672-06-0 466672-10-6
466672-22-0 **466672-27-5** 467233-79-0 467233-80-3

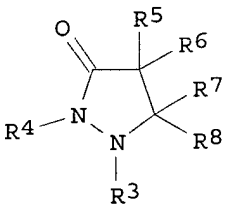
KOROMA EIC1700

467233-81-4 467233-82-5 467233-83-6 467233-84-7 467233-85-8
467233-87-0 **467233-90-5 467233-91-6**
467233-92-7 467248-73-3 467248-74-4 467248-75-5
467248-77-7 467248-79-9 467248-81-3 467248-83-5 467248-85-7
467248-87-9 467248-89-1
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(fluoro surfactant in **photog.** film; method for processing **silver halide photog.** films)

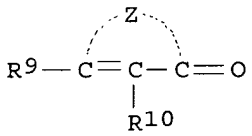
L15 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:734087 CAPLUS
DOCUMENT NUMBER: 137:286319
TITLE: Laser-sensitive **silver halide photographic** material and its processing
INVENTOR(S): Ono, Koji
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002278013	A2	20020927	JP 2001-82666	20010322

PRIORITY APPLN. INFO.: JP 2001-82666 20010322
OTHER SOURCE(S): MARPAT 137:286319
GI



I



II

AB The material comprises a support coated with (A) ≥1 **Ag** halide emulsion layer having optical absorption max at 700-1500 nm and (B) a non-**photosensitive** colloidal layer containing (1) [R1C(CO2L1Rf)CH2]m[R2C(CO2L2Xp)CH2]n (Rf = alkyl with ≥1 F atom; L1-2 = linkage; Xp = H, OH, anionic, cationic, or amphoteric group; R1-2 = H, lower alkyl; m, n = mol ratio; m + n = 1.0), (2) I [R3 = (un)substituted aryl; R4-8 = H, alkyl, aralkyl, aryl (all may be substituted)] or II [R9-10 = OH, mercapto, (un)substituted amino, acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxycarbonyl, alkylthio; Z = nonmetal atoms to form (un)substituted 5- or 6-membered

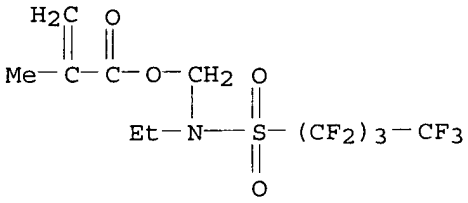
ring], and (3) polyalkylene oxide nonionic surfactant on the upper side. The material is processed by 50-150 mL/m2 replenishment of the developer and fixer. The material shows good antistatic, antisticking, and transporting properties and stain of the **processing soln** . is prevented on low replenish development.

IT **463311-96-8 463311-98-0 463312-00-7 463933-40-6 463934-64-7**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(**photog.** film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

RN 463311-96-8 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with [ethyl[(nonafluorobutyl)sulfonyl]amino]methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

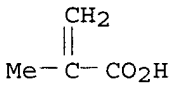
CM 1

CRN 463311-94-6
CMF C11 H12 F9 N O4 S



CM 2

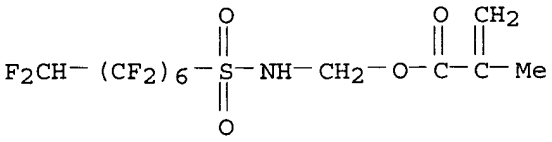
CRN 79-41-4
CMF C4 H6 O2



RN 463311-98-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(sulfomethoxy)ethyl ester, sodium salt, polymer with [[(1,1,2,2,3,3,4,4,5,5,6,6,7,7-tetradecafluoroheptyl)sulfonyl]amino]methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

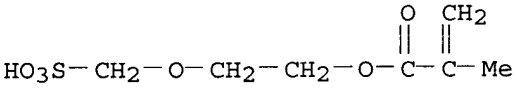
CM 1

CRN 463311-97-9
CMF C12 H9 F14 N O4 S



CM 2

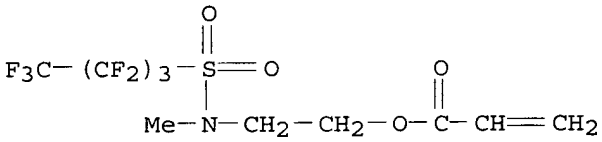
CRN 443907-02-6
CMF C7 H12 O6 S . Na



RN 463312-00-7 CAPLUS
CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

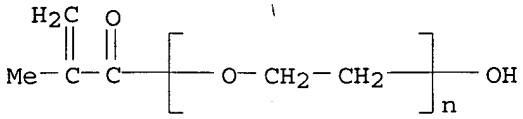
CM 1

CRN 67584-55-8
CMF C10 H10 F9 N O4 S



CM 2

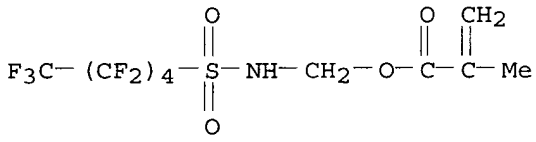
CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



RN 463933-40-6 CAPLUS
CN 2-Propenoic acid, 2-methyl-, [[(undecafluoropentyl)sulfonyl]amino]methyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

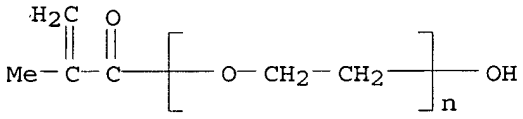
CM 1

CRN 463933-39-3
CMF C10 H8 F11 N O4 S



CM 2

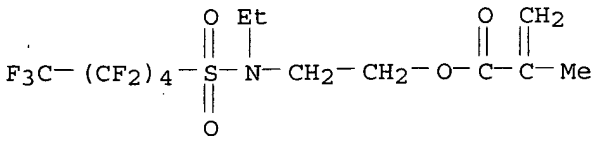
CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



RN 463934-64-7 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[ethyl[(undecafluoropentyl)sulfonyl]amino]ethyl ester, polymer with α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

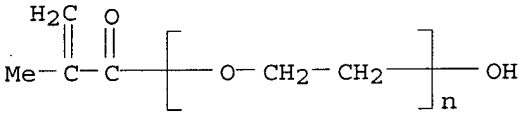
CM 1

CRN 67906-73-4
CMF C13 H14 F11 N O4 S



CM 2

CRN 25736-86-1
CMF (C2 H4 O)n C4 H6 O2
CCI PMS



IC ICM G03C001-12
ICS G03C001-035; G03C001-09; G03C001-76; G03C005-31; G03C005-395
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photog** film fluoro acrylic polymer; polyalkylene oxide nonionic surfactant **photog** film; pyrazolidone cyclic enone compd **photog** film; low replenishment development **photog**; spectral sensitizer **photog** film
IT Surfactants
(nonionic; **photog.** film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)
IT **Photographic** films
(**photog.** film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)
IT 50-81-7, L-Ascorbic **acid**, uses 92-43-3, 1-Phenyl-3-pyrazolidone 43209-02-5 **463311-96-8 463311-98-0 463312-00-7 463933-40-6 463934-64-7**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(**photog.** film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)
IT 16920-56-2
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(**silver halide photog.** emulsion containing iridium compound)
IT 96127-81-0 96962-98-0 146690-63-3 152922-97-9
RL: TEM (Technical or engineered material use); USES (Uses)
(spectral sensitizer; **photog.** film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

L15 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:606638 CAPLUS
DOCUMENT NUMBER: 137:161312
TITLE: Heat-**developable photographic** material containing water-**soluble** polymer-based thickener for improved joint seam
INVENTOR(S): Nabikawa, Hitoshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002229148	A2	20020814	JP 2001-25981	20010201

PRIORITY APPLN. INFO.: JP 2001-25981 20010201

AB The heat-developable **photog.** material comprises a **Ag** halide, a **nonphotosensitive** organic **Ag** salt, a reducing agent, and ≥1 water-soluble polymer as a thickener, wherein the water-soluble polymer contains an **acidic** group. The water-soluble polymer may include polyvinyl benzoic **acid**, polystyrene sulfonic **acid**, and polystyrene phosphonic **acid.** The heat-developable **photog.** emulsion layers also contain a polymer latex such as SBR dispersible in an **aqueous** solvent.

IT **9080-79-9**, Sodium Polystyrene sulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(thickener; Heat-**developable photog.** material containing water-**soluble** polymer-based thickener for improved joint seam)

RN 9080-79-9 CAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50851-57-5
CMF (C8 H8 O3 S)x
CCI PMS

CM 2

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1— CH═ CH_2

D1— SO_3H

IC ICM G03C001-498
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST heat developable **photog** emulsion film SBR latex; thickener vinyl styrene polymer heat developable **photog** emulsion
IT Styrene-butadiene rubber, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Heat-**developable photog.** material containing water-**soluble** polymer-based thickener for improved joint seam)
IT **Photographic** emulsions
Photographic films
(heat-developable; Heat-**developable photog.** material containing water-**soluble** polymer-based thickener for improved joint seam)
IT 9003-55-8
RL: TEM (Technical or engineered material use); USES (Uses)
(styrene-butadiene rubber, Heat-**developable photog.** material containing water-**soluble** polymer-based thickener for improved joint seam)
IT **9080-79-9**, Sodium Polystyrene sulfonate 446062-36-8
RL: TEM (Technical or engineered material use); USES (Uses)
(thickener; Heat-**developable photog.** material containing water-**soluble** polymer-based thickener for improved joint seam)

L15 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:309807 CAPLUS
DOCUMENT NUMBER: 136:348228
TITLE: Protective epoxy overcoat that resists fingerprints, stains and spills for **photographic** elements
INVENTOR(S): Wang, Yongcai; O'Connor, Kevin M.; Kestner, Melvin M.; Bello, James L.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 14 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6376160	B1	20020423	US 2000-699789	20001030
JP 2002148758	A2	20020522	JP 2001-330940	20011029
CN 1351279	A	20020529	CN 2001-137594	20011030

PRIORITY APPLN. INFO.: US 2000-699789 A 20001030

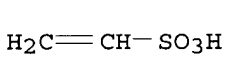
AB The overcoat comprises an epoxy material, an **acid** polymer, and a H2O-soluble hydrophilic binder. In 1 embodiment, a **photog.** element includes a support, ≥1 **Ag** halide emulsion layer superposed on the support and a **processing-soln** .-permeable overcoat overlying the **Ag** halide emulsion layer that becomes H2O-resistant in the final product without requiring lamination or fusing. The present invention is also directed to a method of making a print involving developing the **photog.** element.

IT **26101-52-0 50851-57-5**
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)

RN 26101-52-0 CAPLUS
CN Ethenesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1184-84-5
CMF C2 H4 O3 S



RN 50851-57-5 CAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1— CH═ CH_2

D1— SO_3H

IC ICM G03C001-815
ICS G03C001-76; G03C011-06; G03C005-26
NCL 430350000
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST protective epoxy resin overcoat **photog** diglycidyl ether dihydric phenol; polyvinyl alc polyamide hydrophilic polymer binder
IT Whey
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)
IT Acrylic polymers, uses
Albumins, uses
Gelatins, uses
Polyesters, uses
Polyoxyalkylenes, uses
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)
IT Color **photographic** paper
(water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)
IT Epoxy resins, uses
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)
IT 25805-17-8D, Poly(ethyloxazoline), derivs.
RL: NUU (Other use, unclassified); USES (Uses)
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)
IT 9002-81-7, Polyoxymethylene 9002-98-6 9003-01-4 9003-05-8D, Polyacrylamide, derivs. 9003-09-2 9004-34-6D, Cellulose, ethers 9004-54-0, Dextrans, uses 9005-25-8, Starch, uses 9005-32-7, Alginic **acid** 25087-26-7 25249-16-5 25322-68-3 25805-17-8, Poly(ethyloxazoline) 26099-09-2 **26101-52-0** 29690-74-2 **50851-57-5**
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)

IT 25068-38-6, Epon 1001F
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(particles; water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)

IT 9002-89-5, Poly(vinyl alcohol) 25135-39-1, Carboset 525 29690-82-2 34306-73-5, Carboset 526 115965-96-3, Airvol 203
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:709890 CAPLUS
DOCUMENT NUMBER: 135:280424
TITLE: Black-and-white **silver halide** **photographic** material containing polymer latex and hydrazine and its processing
INVENTOR(S): Arai, Takeo
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 71 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001264915	A2	20010928	JP 2000-75863	20000317

PRIORITY APPLN. INFO.: JP 2000-75863 20000317
OTHER SOURCE(S): MARPAT 135:280424

AB The material comprises a support having thereon (A) ≥1 emulsion layer containing (1) 0.010-5 g/m2 inorg. particles or complex latex comprising the inorg. particles and an organic polymer and (2) 0.010-2.0 g/m2 polymer latex with glass transition temperature ≤10° and (B) ≥1 hydrophilic colloid layer containing ≥1 hydrazine compound, where gelatin content in a **Ag** halide emulsion layer-containing side on the support is ≤2.5 g/m2. It is **processed** with a **solution** containing a **developing** agent R1(OM1)C:C(OM2)XkR2 [R1, R2 = each (un)substituted alkyl, alkoxy, and alkylthio; R1 and R2 may form a ring; k = 0, 1; upon k = 1, X = CO, CS; M1, M2 = H, alkali metal atom]. It showed improved pressure, crack, and blackening resistance and high contrast.

IT **362630-88-4**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** emulsion containing complex latex and polymer latex)

RN 362630-88-4 CAPLUS

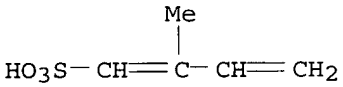
CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with ethenylbenzene and 2-methyl-1,3-butadiene-1-sulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 362630-87-3
CMF (C8 H8 . C7 H12 O2 . C5 H8 O3 S)x
CCI PMS

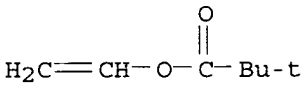
CM 2

CRN 154025-29-3
CMF C5 H8 O3 S



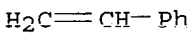
CM 3

CRN 3377-92-2
CMF C7 H12 O2



CM 4

CRN 100-42-5
CMF C8 H8



IC ICM G03C001-06
ICS G03C001-04; G03C001-047; G03C001-18; G03C001-26; G03C001-91; G03C005-30
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photog** emulsion polymer latex inorg particle; hydrazine black white **photog** film; ascorbic **acid** deriv **photog** developer
IT **Photographic** developers

(**photog.** developer containing ascorbic **acid** derivative)
IT **Photographic** emulsions
(**photog.** emulsion containing complex latex and polymer latex)
IT **Photographic** films
(**photog.** film containing hydrazine complex latex, and polymer latex)
IT **Photographic** sensitizers
(**photog.** film containing hydrazine, complex latex, and polymer latex)
IT 6381-77-7, Sodium erythorbate
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** developer containing ascorbic **acid** derivative)
IT 9002-85-1, Poly(vinylidene chloride) 9003-32-1, Poly(ethyl acrylate) 9003-49-0, Poly(butyl acrylate) 9003-53-6, Polystyrene 362630-86-2 **362630-88-4** 362630-89-5 362630-91-9
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** emulsion containing complex latex and polymer latex)
IT 210694-55-6
RL: DEV (Device component use); USES (Uses)
(**photog.** film containing hydrazine, complex latex and polymer latex)
IT 23368-55-0 165809-77-8 166888-42-2 173592-90-0 174214-41-6 224177-92-8 228121-19-5 253869-55-5 311761-77-0 362630-92-0 362630-93-1 362630-94-2 362630-95-3 362630-96-4 362630-97-5 362630-98-6
RL: DEV (Device component use); USES (Uses)
(sensitizer; **photog.** emulsion containing complex latex and polymer latex)

L15 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:829370 CAPLUS
DOCUMENT NUMBER: 134:23430
TITLE: Protective overcoat comprising interpenetrating network for **photographic** elements
INVENTOR(S): Nair, Mridula; Jones, Tamara K.; Lobo, Lloyd A.; Schell, Brian A.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 16 pp., Cont.-in-part of U.S. 6,077,648.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6153363	A	20001128	US 1999-447409	19991123
US 6077648	A	20000620	US 1999-235436	19990122

PRIORITY APPLN. INFO.: US 1999-235436 A2 19990122
AB The present invention is a **photog.** element which includes a support, at least one **silver-halide** emulsion layer

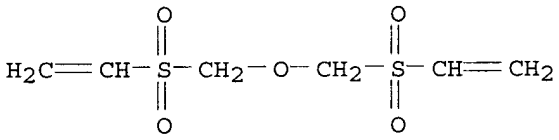
superposed on the support and a **processing-soln** .-permeable protective overcoat overlying the **silver halide** emulsion layer. The **processing-soln** .-permeable overcoat is composed of a polyurethane-containing component having **acid** functionalities wherein the polyurethane-containing component is an interpenetrating network further comprising at least two polymers, including at least one vinyl polymer and at least one urethane polymer. Suitably, a water-soluble polymer is also present in the overcoat. The present invention is also directed to a method of making a **photog** . print involving developing the **photog.** element in an alkaline **developer solution**

IT **313361-25-0P 314080-86-9P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(protective overcoat comprising interpenetrating network for **photog.** elements)

RN 313361-25-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 1,6-hexanediyl di-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

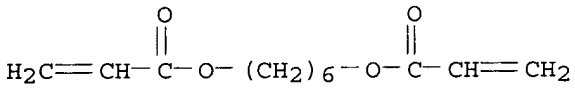
CM 1

CRN 26750-50-5
CMF C6 H10 O5 S2



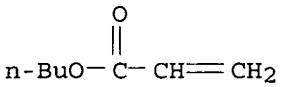
CM 2

CRN 13048-33-4
CMF C12 H18 O4



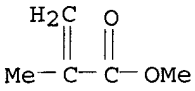
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

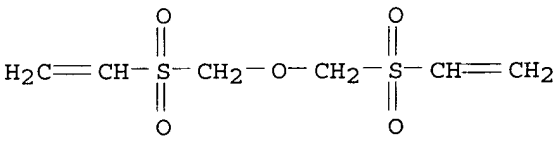
CRN 80-62-6
CMF C5 H8 O2



RN 314080-86-9 CAPLUS
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

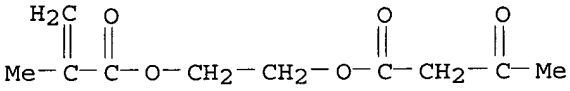
CM 1

CRN 26750-50-5
CMF C6 H10 O5 S2



CM 2

CRN 21282-97-3
CMF C10 H14 O5

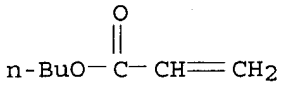


CM 3

CRN 141-32-2

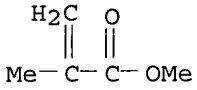
KOROMA EIC1700

CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03C001-815
ICS G03C001-89; G03C001-76; G03C011-08
NCL 430350000
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 42
ST **photog** paper overcoat protective layer urethane vinyl polymer; development **photog** paper
IT Vinyl compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers; protective overcoat comprising interpenetrating network for **photog.** elements)
IT Coating materials
(protective overcoat comprised of polyurethane-vinyl polymer interpenetrating networks for **photog.** paper)
IT Interpenetrating polymer networks
Photographic development
Photographic paper
(protective overcoat comprising interpenetrating network for **photog.** elements)
IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(protective overcoat comprising interpenetrating network for **photog.** elements)
IT 9002-89-5
RL: TEM (Technical or engineered material use); USES (Uses)
(in protective overcoat comprised of polyurethane-vinyl polymer interpenetrating networks for **photog.** paper)
IT **313361-25-0P 314080-86-9P** 327615-58-7P 327615-77-0P 327615-84-9P 327615-86-1P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(protective overcoat comprising interpenetrating network for **photog.** elements)
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:808609 CAPLUS
DOCUMENT NUMBER: 133:367790
TITLE: Overcoat for reticulation control in **photographic** elements
INVENTOR(S): Nair, Mridula; Lobo, Lloyd Anthony; Jones, Tamara Kay
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1052542	A1	20001115	EP 2000-201558	20000501
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6153362	A	20001128	US 1999-313556	19990514
JP 2000347348	A2	20001215	JP 2000-147505	20000515

PRIORITY APPLN. INFO.: US 1999-313556 A 19990514

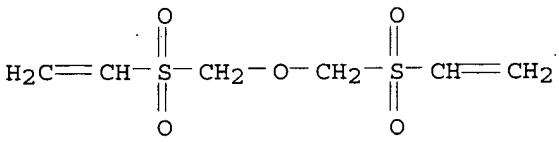
AB A **photog.** element containing a support; at least two contiguous layers, at least one of which is a **silver halide** emulsion layer superposed on a side of said support; a **processing solution** permeable protective overcoat containing a urethane-vinyl copolymer having **acid** functionalities wherein a weight ratio of a urethane component in the copolymer comprises from 20 to 100 percent and a weight ratio of a vinyl component in the copolymer comprises from 0 to 80 percent; a crosslinker for the said copolymer; and a second polymer selected from the group consisting of polyvinyl alc., cellulose ethers, n-vinyl amides, polyesters, poly(ethylene oxide), starch, proteins, whey, albumin, poly(acrylic **acid**), alginates and gums overlying the said at least two contiguous layers; and wherein the ratio of the gelatin to non-gelatin content of the dried layers immediately underlying the uppermost gelatin layer is less than 1.3 with the proviso that the water content of the wet coating of all the gelatin layers prior to drying is at a coverage of greater than 53 g/m2.

IT **313361-25-0P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane interpenetrating networks; overcoat for reticulation control in **photog.** elements)

RN 313361-25-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 1,6-hexanediyl di-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

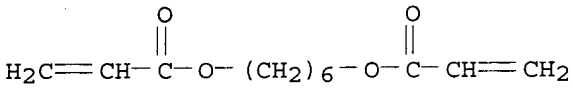
CM 1

CRN 26750-50-5
CMF C6 H10 O5 S2



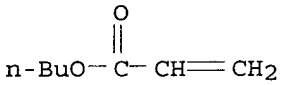
CM 2

CRN 13048-33-4
CMF C12 H18 O4



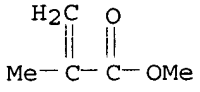
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03C001-76
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and

KOROMA EIC1700

Other Reprographic Processes)
Section cross-reference(s): 35, 38, 42
ST **photog** paper overcoat polyurethane polyacrylate
IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(acrylates; overcoat for reticulation control in **photog.** elements)
IT Coating materials
Photographic paper
(overcoat for reticulation control in **photog.** elements)
IT Interpenetrating polymer networks
(polyacrylate-polyurethane; overcoat for reticulation control in **photog.** elements)
IT 327615-58-7P 327615-77-0P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(overcoat for reticulation control in **photog.** elements)
IT 115965-96-3, Airvol 203 192948-73-5, NeoPac R 9699
RL: TEM (Technical or engineered material use); USES (Uses)
(overcoat for reticulation control in **photog.** elements)
IT 313362-62-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyacrylate interpenetrating networks; overcoat for reticulation control in **photog.** elements)
IT **313361-25-0P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane interpenetrating networks; overcoat for reticulation control in **photog.** elements)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:415468 CAPLUS
DOCUMENT NUMBER: 133:36022
TITLE: Protective overcoat for **photographic** elements
INVENTOR(S): Nair, Mridula; Jones, Tamara K.; Lobo, Lloyd A.; Schell, Brian A.
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6077648	A	20000620	US 1999-235436	19990122
US 6153363	A	20001128	US 1999-447409	19991123

EP 1022610 A1 20000726 EP 2000-200090 20000112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: US 1999-235436 A2 19990122

AB The present invention is a **photog.** element which includes a support, a **silver halide** emulsion layer superposed on the support and a **processing solution** permeable protective overcoat overlying the **silver halide** emulsion layer. The **processing solution** permeable overcoat is composed of a urethane-vinyl copolymer having **acid** functionalities wherein a weight ratio of the urethane in the copolymer comprises from 20-100 % and a weight ratio of the vinyl in the copolymer comprises from 0-80 %. The present invention is a method of making a **photog.** element which includes providing an **photog.** element having a support, a **silver halide** emulsion layer superposed on the support and a **processing solution** permeable protective overcoat overlying the **silver halide** emulsion layer. The **processing solution** permeable overcoat is composed of a urethane-vinyl copolymer having **acid** functionalities wherein a weight ratio of the urethane in the polymer comprises from 20-100 % and a weight ratio of the vinyl in the polymer comprises from 0 to 80 percent. The **photog.** element is **developed** in a **developer solution** having a pH greater than 7 and the **processing solution** permeable overcoat is fused.

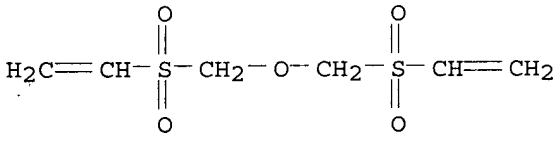
IT **313361-25-0P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane interpenetrating networks; protective overcoat for **photog.** elements)

RN 313361-25-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 1,6-hexanediyl di-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

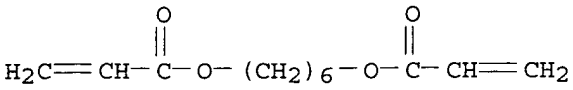
CRN 26750-50-5
CMF C6 H10 O5 S2



CM 2

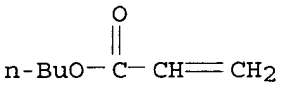
CRN 13048-33-4

CMF C12 H18 O4



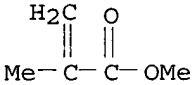
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03C005-29
ICS G03C001-76; G03C011-06
NCL 430350000
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 42
ST protective overcoat **photog** element
IT Polyurethanes, preparation
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylates; protective overcoat for **photog.** elements)
IT Interpenetrating polymer networks
(polyacrylate-polyurethane; protective overcoat for **photog.** elements)
IT Coating materials
Photographic films
(protective overcoat for **photog.** elements)
IT 306997-10-4P 309269-39-4P 313362-62-8P 313364-59-9P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

KOROMA EIC1700

(polyacrylate interpenetrating networks; protective overcoat for **photog.** elements)

IT **313361-25-0P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane interpenetrating networks; protective overcoat for **photog.** elements)

IT 165245-61-4, Flexthane 620 192948-73-5, NeoPac R 9699 194944-48-4, NeoCryl A 5090 200415-08-3, NeoRez 9679
RL: TEM (Technical or engineered material use); USES (Uses)
(protective overcoat for **photog.** elements)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:277494 CAPLUS
DOCUMENT NUMBER: 130:344984
TITLE: **Silver halide photographic photosensitive** material and processing thereof
INVENTOR(S): Ishikawa, Wataru
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11119367	A2	19990430	JP 1997-280456	19971014

PRIORITY APPLN. INFO.: JP 1997-280456 19971014
OTHER SOURCE(S): MARPAT 130:344984

AB In the title material possessing ≥1 **Ag** halide emulsion layer and ≥1 hydrophilic colloid layer on a support and containing ≥1 polymer latex, ≥1 of the emulsion and/or colloid layers is hardened with ≥1 hardener (CH2:CHSO2CH2CONR1)2An1, N,N',N"-tris(vinylmethylcarbonyl)hexahydrotriazine, or CH2:CHSO2CHR2(OCHR3)n2SO2CH:CH2 (R1 = H or C1- 4 alkyl, 2 R1 groups are the same or different; R2, R3 = H, alkyl, aralkyl, aryl; A = divalent group; n1, n2 = 0 or 1) and the pH value of the coating **solution** of ≥1 of the emulsion and/or colloid layers or that of the coating surface is 6.5-10. The material is processed following exposure by using an automatic processor in which the replenishment rates of the **developing solution** and fixing **solution** are 50-150 and 100-300 mL/m2 material, resp. The material for printing platemaking shows stable sensitivity and prevents pepper fog and the formation of **Ag** sludge in running process using a low replenishment rate and exhibits good drying properties and scratch resistance in rapid processing.

IT **224582-02-9**
RL: DEV (Device component use); MOA (Modifier or additive use); USES

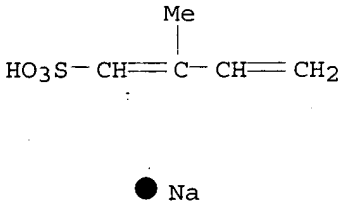
(Uses)
(**photog.** film containing vinylsulfone derivative hardener and polymer latex)

RN 224582-02-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate and sodium 2-methyl-1,3-butadiene-1-sulfonate (9CI) (CA INDEX NAME)

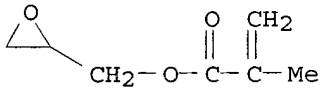
CM 1

CRN 120129-07-9
CMF C5 H8 O3 S . Na



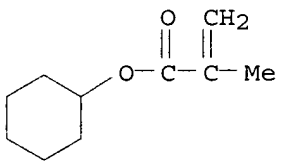
CM 2

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 101-43-9
CMF C10 H16 O2



CM 4

CRN 100-42-5
CMF C8 H8

$H_2C{=}CH{-}Ph$

IC ICM G03C001-30
ICS G03C001-04; G03C001-047; G03C001-06; G03C001-74; G03C005-395
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photog** hardener vinylsulfone deriv; polymer latex **photog** film
IT **Photographic** processing
(automatic processing of **photog.** film containing vinylsulfone derivative **photog.** hardener)
IT **Photographic** films
Photographic hardening agents
(**photog.** film containing vinylsulfone derivative hardener and polymer latex)
IT 7631-86-9, Silica, uses 25586-20-3, Acrylic **acid**-butyl acrylate-styrene copolymer 66710-66-5 105532-31-8 136577-43-0 161195-83-1, Cyclohexyl methacrylate-glycidyl methacrylate-nonyl acrylate copolymer 224582-00-7 **224582-02-9**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** film containing vinylsulfone derivative hardener and polymer latex)

L15 ANSWER 13 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:624003 CAPLUS
DOCUMENT NUMBER: 129:237697
TITLE: A correcting agent for a **silver** imaged lithographic printing plates
INVENTOR(S): Deprez, Lode
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 864928	A1	19980916	EP 1998-200421	19980210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10254126	A2	19980925	JP 1998-71194	19980306

PRIORITY APPLN. INFO.: EP 1997-200722 19970311
AB A bleach-fixing agent for making corrections on **silver** imaged lithog. printing plates, which work according to the **silver** salt

diffusion transfer reversal mechanism, is disclosed. By limiting the amount of volatile organic solvents, having a b.p. lower than 100°, comprised in the correcting agent, to a value not higher than 20% by volume and by adjusting the viscosity of same correcting agent to a value higher than 3 mPas, an improved correcting agent is obtained which is characterized by both a short deletion time, required to convert the undesired oleophilic printing areas into hydrophilic ink-rejecting areas, as well as a short drying time of the correcting agent after being applied to the printing plate's surface.

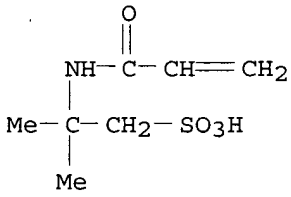
IT **40623-73-2**, Acrylamide-2-acylamido-2-methylpropanesulfonic **acid** copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(correcting **solns.** for lithog. printing plates by **silver** salt diffusion transfer reversal process containing)

RN 40623-73-2 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

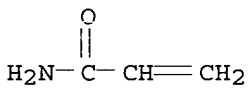
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



CM 2

CRN 79-06-1
CMF C3 H5 N O



IC ICM G03F007-06

CC **74-6** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **silver** lithog plate correction bleach fixing

IT **Photographic processing**
(bleach-fixing **solns.** with limiting amount of volatile organic solvents for correcting **silver** lithog. plates)

IT Diffusion-transfer **photographic** films

KOROMA EIC1700

(**photog.** bleach-fixing **solns.** with limiting amount of volatile organic solvents for correcting lithog. plates from)

IT Lithographic plates
(**silver**; **photog.** bleach-fixing **solns.** with limiting amount of volatile organic solvents for correcting)

IT 64-02-8, Tetrasodium ethylenediaminetetraacetate 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 77-92-9, Citric **acid**, uses 107-98-2, 1-Methoxy-2-propanol 1310-73-2, Sodium hydroxide, uses 6440-06-8, 1H-1,2,3-Triazole-4-thiol 7757-83-7, Sodium sulfite 7783-18-8, Ammonium **thiosulfate** 21265-50-9, Ammonium ferric ethylenediaminetetraacetate 39354-52-4, Ambiteric H **40623-73-2**, Acrylamide-2-acylamido-2-methylpropanesulfonic **acid** copolymer 53320-86-8, Laponite RD
RL: TEM (Technical or engineered material use); USES (Uses)
(correcting **solns.** for lithog. printing plates by **silver** salt diffusion transfer reversal process containing)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:605082 CAPLUS
DOCUMENT NUMBER: 129:209267
TITLE: **Silver halide** material for optical memory device with luminescent reading and method for treatment thereof
INVENTOR(S): Levich, Eugene B.; Malkin, Jacob N.; Alperovich, Mark A.; Shapiro, Boris M.
PATENT ASSIGNEE(S): Trid Store Inc., USA
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9837456	A1	19980827	WO 1998-US3540	19980224
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9866650	A1	19980909	AU 1998-66650	19980224
EP 963571	A1	19991215	EP 1998-908681	19980224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6265140	B1	20010724	US 1998-28932	19980224
US 2002115026	A1	20020822	US 2002-886979	20020115

IT Graphic arts
(**silver halide photog.** emulsions for
forming luminescent particles for three-dimensional displays in)
IT 3654-76-0 18244-78-5 23178-66-7 28413-71-0 36528-80-0 54118-16-0
127635-66-9 212209-94-4
RL: DEV (Device component use); NUU (Other use, unclassified); TEM
(Technical or engineered material use); USES (Uses)
(in preparation of **silver halide photog.**
emulsions for forming luminescent particles for optical memory devices)
IT 9002-89-5, Poly(vinyl alcohol) 9003-39-8, Poly(vinylpyrrolidone)
9004-32-4 9004-38-0, Cellulose acetophthalate **25191-25-7**,
Poly(vinyl **sulfate**) 25897-89-6D, Polydiacetoneacrylamide,
graft copolymers with gelatins 26949-19-9D, Poly-N,N'-
methylenediacrylamide, graft copolymers with gelatins 65744-44-7D, graft
copolymers with gelatins
RL: DEV (Device component use); TEM (Technical or engineered material
use); USES (Uses)
(in preparation of **silver halide photog.**
emulsions for forming luminescent particles for optical memory devices)
IT 86-93-1, 1-Phenyl-5-mercaptotetrazole 95-14-7, 1H-Benzotriazole
148-24-3, 8-Hydroxyquinoline, uses 149-30-4, 2-Mercaptobenzothiazole
333-20-0, Potassium thiocyanate 583-39-1, 2-Mercaptobenzimidazole
1313-82-2, Sodium sulfide (Na2S), uses 2321-07-5, Fluorescein
2382-96-9, 2-Mercaptobenzoxazole 3251-23-8 7789-42-6, Cadmium bromide
13494-90-1, Gallium trinitrate 13746-66-2, Tripotassium hexacyanoferrate
16423-68-0, Erythrosine 39201-42-8 64339-18-0, Rhodamine 101
84522-13-4, Methylcalcein 190517-63-6 212209-95-5
RL: NUU (Other use, unclassified); TEM (Technical or engineered material
use); USES (Uses)
(in **processing solns.** for **silver**
halide photog. emulsions for forming luminescent
particles for optical memory devices)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

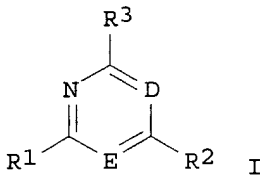
L15 ANSWER 15 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:600234 CAPLUS
DOCUMENT NUMBER: 129:283385
TITLE: Processing of tetrazolium-containing **silver**
halide photographic material with
mercapto compound-containing developer to improve
characteristic and dot quality
INVENTOR(S): Yasuda, Shoji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

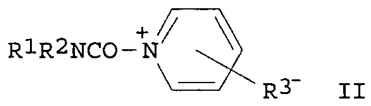
JP 10246935	A2	19980914	JP 1997-49467	19970304

PRIORITY APPLN. INFO.: JP 1997-49467 19970304

GI



I



II

AB Claimed method for processing **photog.** material having a supported **Ag** halide emulsion layer comprises imagewise exposure followed by **development** with a **developer soln**. containing a N-containing heterocyclic compound I (D, E = N, -CH:, -CR0:, N; R0 = substituent; R1-3 = H, halo, substituent combined with the 6-membered ring through N, O, S, or C atom; ≥1 of the substituents has SM group; M = H, alkali metal, ammonium), where the **photog.** material contains a heavy metal selected from Ir, Ru, Rh, Re, and Cr, a tetrazolium compound, and an optional dye with optical d. ≥0.2 at 360 nm in the emulsion layer, and the **photog.** material has **Ag** /thickness ratio of ≥0.6 in the emulsion layer, the protective layer thickness of ≤1.2 μm, ≤5.0 μm the total thickness of the coated layer on the emulsion side, and ≤120% the swell ratio of the coated layer. In the method, ≥1 hydrophilic colloid layer may be crosslinked with an urea derivative II (R1, R2 = alkyl, aryl; R1 and R2 may form a ring; R3 = LXSO3-, **acidic** substituent; L = none, divalent group; X = none, O, NR4; R4 = H, alkyl, aryl) or contain gelatin-stabilized polymer latex. The method is suitably applied to **photomech.** process, and provides developed image with good quality and dot tone. The **developer solution** does not generate **Ag** sludges. Thus, a black-and-white **photog**. film for **photomech.** use containing N-(N',N'-diethylaminocarbonyl)-3-sulfopyridinium and strongly hardened with an urea derivative was processed by a developer containing 2-(N-phenyl-N-carboxymethyl-amino)-4,6-dimercapto-1,3,5-triazine to obtain images with the mentioned advantages.

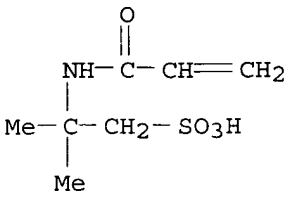
IT **154217-46-6**, Styrene-methyl methacrylate-ethyl acrylate-sodium 2-methyl-2-acrylamidopropanesulfonate copolymer
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(latex; development of tetrazolium-containing **Ag** halide **photog.** material with mercapto compound-containing developer to improve characteristic and dot quality)

RN 154217-46-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

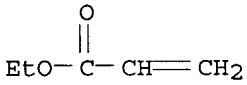
CM 1

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



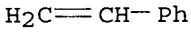
CM 2

CRN 140-88-5
CMF C5 H8 O2



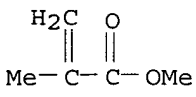
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

CRN 80-62-6
CMF C5 H8 O2



KOROMA EIC1700

IC ICM G03C005-29
ICS G03C001-035; G03C001-04; G03C001-06; G03C001-09; G03C001-30; G03C001-36; G03C001-76; G03C001-815; G03C005-30; G03C005-305; G03C005-31

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST tetrazolium heavy metal **photog** film development; mercaptotriazine **photog** developer; mercaptopyrimidine **photog** developer; urea hardener **photog** film development

IT **Photographic** developers
Photographic development
Photographic films
(development of tetrazolium-containing **Ag** halide **photog** material with mercapto compound-containing developer to improve characteristic and dot quality)

IT 13845-07-3 14854-54-7, Potassium pentachloronitrosylruthenate(III)
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(development of tetrazolium-containing **Ag** halide **photog** material with mercapto compound-containing developer to improve characteristic and dot quality)

IT 104497-79-2
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(development of tetrazolium-containing **Ag** halide **photog** material with mercapto compound-containing developer to improve characteristic and dot quality)

IT 175161-86-1 194982-72-4
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(development of tetrazolium-containing **Ag** halide **photog** material with mercapto compound-containing developer to improve characteristic and dot quality)

IT 14542-06-4 94266-02-1
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(dye; development of tetrazolium-containing **Ag** halide **photog.** material with mercapto compound-containing developer to improve characteristic and dot quality)

IT 139486-50-3 148681-23-6 161032-15-1
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(film hardener; development of tetrazolium-containing **Ag** halide **photog.** material with mercapto compound-containing developer to improve characteristic and dot quality)

IT 25085-39-6, Acrylic **acid**-butadiene-styrene copolymer
154217-46-6, Styrene-methyl methacrylate-ethyl acrylate-sodium 2-methyl-2-acrylamidopropanesulfonate copolymer
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(latex; development of tetrazolium-containing **Ag** halide

photog. material with mercapto compound-containing developer to improve characteristic and dot quality)

L15 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:335110 CAPLUS
DOCUMENT NUMBER: 129:73984
TITLE: **Silver halide photographic** material containing hydrazine and gelatin-interacting compound, its process and the image-forming method
INVENTOR(S): Muramatsu, Yasuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 73 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10133317	A2	19980522	JP 1996-292617	19961105

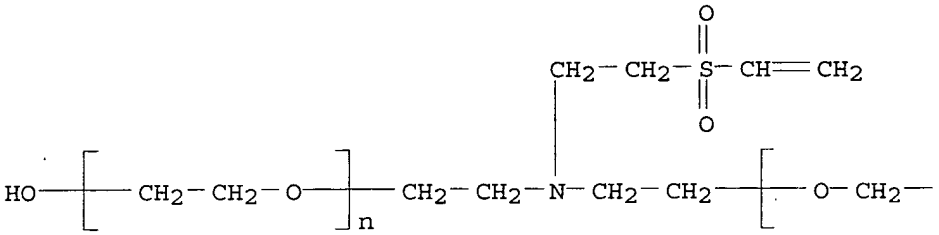
PRIORITY APPLN. INFO.: JP 1996-292617 19961105

AB Claimed **photog.** material having a **Ag** halide emulsion layer on a support contains a hydrazine derivative and an amine having a functional group or the precursor which reacts with the amino or carboxy group in the side chain of the gelatin mol. The amine or the precursor has the structure AmLnR1NR2R3 (I; A = functional group or the precursor stated above; R1 = alkylene, alkenylene, arylene; R2 and R3 = H, alkyl, alkenyl, aryl; L = linkage group; m = 0, 1; n = 1-4). Also claimed is the method for processing the material by an automatic processor using a reductone-containing **developer solution** of pH of 9.0-10.9 with the replenishing rate of 30-200 L/m2. Further claimed is the image-forming method comprising developing the **photog.** material with a solid processing chemical It provides an image with low fog, low black pepper d. and high contrast, even by the low pH **developer solution** It also has a good processing stability. Suitable compds. I are N-(vinylsulfo-ethyl)diethylamine, N-(vinylsulfo-ethoxyethyl)diethylamine, N-[1-ethyl-1-(4-ethyleneiminocarbonylaminophenoxy)]diethyl amine, n-[epoxymethoxy(triethoxy)ethyl]diethylamine, etc., and suitable reductone added to the developer as the developing agent is an ascorbic **acid** derivative

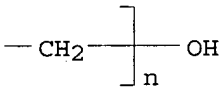
IT **208936-76-9**
RL: DEV (Device component use); USES (Uses)
(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)

RN 208936-76-9 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α,α'-[[[2-(ethenylsulfonyl)ethyl]imino]di-2,1-ethanediyl]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03C001-06
ICS G03C001-295; G03C005-26; G03C005-29; G03C005-30; G03C005-31

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photomech** process **photog** material; hydrazine deriv additive **photog** material; amine compd additive **photog** material; epoxyalkylamine hardener additive **photog** material; vinylsulfone hardener additive **photog** material; ethyleneimine hardener additive **photog** material; reductone developing agent **photog** processing

IT **Photographic** development
(development of **photog.** material containing hydrazine and gelatin-interacting amine compound by low-pH **developer solution**)

IT Lithographic films (**photographic**)
(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)

IT Amines, uses
RL: DEV (Device component use); USES (Uses)
(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)

IT 50-81-7, Ascorbic **acid**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(developing agent; development of **photog.** material containing hydrazine and gelatin-interacting amine compound by low-pH **developer solution**)

IT 17700-22-0 197900-28-0 208936-75-8 **208936-76-9** 208936-77-0 208936-78-1 208936-79-2 208936-80-5 208936-81-6 208936-82-7

208936-83-8 208936-85-0 208936-86-1 208936-87-2 208936-88-3
208936-89-4 208936-90-7 208936-91-8 208936-92-9 208936-93-0
208936-94-1 208936-95-2 208936-96-3 208936-97-4 208936-98-5
208936-99-6
RL: DEV (Device component use); USES (Uses)
(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)

L15 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:119210 CAPLUS
DOCUMENT NUMBER: 128:210812
TITLE: **Silver halide photographic** material and image formation using it
INVENTOR(S): Ishikawa, En
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 86 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10048765	A2	19980220	JP 1996-207190	19960806
US 5985530	A	19991116	US 1997-900997	19970725
EP 823656	A2	19980211	EP 1997-113459	19970804
EP 823656	A3	19980415		
EP 823656	B1	20020410		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: JP 1996-207190 A 19960806
JP 1996-208286 A 19960807

AB The title material possesses, on a support, 3-10 layers ≥1 of which is a **photosensitive Ag** halide emulsion layer having a spectral sensitization max at 600-900 nm and ≥1 of which is a hydrophilic colloid layer and contains a composite latex comprising inorg. particles and a hydrophobic polymer in the emulsion layer and/or the colloid layer and ≥1 lubricant, water-soluble polymer, latex, lipophilic component and/or mat agent in the colloid layer. The material is imagewise exposed and **processed** with a **developing solution** of pH 9.5-11.0 to form a high contrast image with γ value 10-30. The material for printing platemaking shows good scratch resistance, anti-cracking properties, anti-curling properties, and drying properties upon rapid processing.

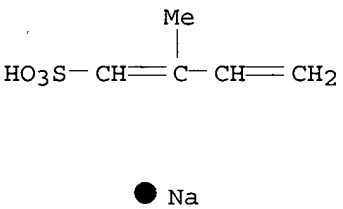
IT **178182-08-6**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** film containing lubricant and composite latex containing hydrophobic polymer and inorg. particle)

RN 178182-08-6 CAPLUS
CN 1,3-Butadiene-1-sulfonic acid, 2-methyl-, sodium salt, polymer with

ethenylbenzene (9CI) (CA INDEX NAME)

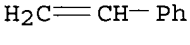
CM 1

CRN 120129-07-9
CMF C5 H8 O3 S . Na



CM 2

CRN 100-42-5
CMF C8 H8



IC ICM G03C001-04
ICS G03C001-047; G03C001-06; G03C001-12; G03C001-38; G03C001-43; G03C005-29

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photog** film composite polymer latex; lubricant **photog** film; matt agent **photog** film

IT Lubricants
Photographic films
(**photog.** film containing lubricant and composite latex containing hydrophobic polymer and inorg. particle)

IT Polysiloxanes, uses
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** film containing lubricant and composite latex containing hydrophobic polymer and inorg. particle)

IT 25586-20-3, Acrylic **acid**-butyl acrylate-styrene copolymer
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(lipophilic component; **photog.** film containing lubricant and composite latex containing hydrophobic polymer and inorg. particle)

IT 9011-14-7, Poly(methyl methacrylate)
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(matt agent; **photog.** film containing lubricant and composite

latex containing hydrophobic polymer and inorg. particle)

IT 7631-86-9, Silica, uses 9003-39-8, Poly(vinylpyrrolidone) 9004-54-0, Dextran, uses 9011-09-0, Butyl acrylate-1,1-dichloroethylene copolymer 26355-01-1, 2-Hydroxyethyl methacrylate-methyl methacrylate copolymer 31900-57-9D, Dimethylsilanediol homopolymer, trimethylsilyl-terminated 42557-10-8, Dimethylsiloxane, trimethylsilyl-terminated 66218-20-0, Cyclohexyl methacrylate-glycidyl methacrylate copolymer **178182-08-6** 204077-29-2, Cyclohexyl acrylate-glycidyl acrylate-nonyl acrylate copolymer
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** film containing lubricant and composite latex containing hydrophobic polymer and inorg. particle)

L15 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:715683 CAPLUS
DOCUMENT NUMBER: 128:41557
TITLE: **Silver halide photographic** material containing a hydrazine and a development inhibitor releaser and its processing
INVENTOR(S): Ito, Hirohide
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 49 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09281645	A2	19971031	JP 1996-98162	19960419

PRIORITY APPLN. INFO.: JP 1996-98162 19960419
OTHER SOURCE(S): MARPAT 128:41557

AB Claimed **photog.** material has (1) a **Ag** halide emulsion layer containing ≥1 nucleator selected from hydrazines and N-containing heterocyclic compound having reducing potential of ≤-0.60 v, (2) a hydrophilic colloid layer containing a development inhibitor-releasing compound and (3) an interlayer containing water-soluble polymer. Also claimed is the method for developing the material using a **developer solution** with the pH of ≤10.5. It provides an image with high contrast and reproduction quality on fine lines, and is suitable for **photomech.** applications. It also has good image stability. Preferable DIR compound is 1-phenyl-4-(DI moiety)-5-pyrazolone having time-controlling function in the DI moiety. Thus, a black-and-white **photog.** material having a **Ag**(Br30Cl70) emulsion layer containing 1-(2,2,6,6-tetramethylpiperazin-4-yl-amino-oxalyl)-2-[4-[3-[phenyl(4-chlorophenyl)phenylmethylthoacetoamido]phenylsulfoamino]phenyl]hydrazine, an interlayer containing a dextrin and a polymer latex, and a hydrophilic colloid layer containing 1-phenyl-3-[1-(2,5-di-tert-amylphenoxy)-1-(isopropyl)acetamino]-4-(1-phenyltetrazol-yl-5-thioethylphenoxycarbonylamino)-5-pyrazolone was suitable for

photomech. use.

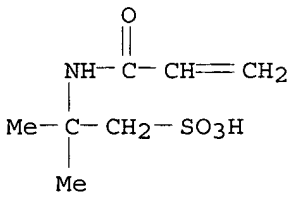
IT **154217-46-6**, Styrene-methyl methacrylate- ethyl acrylate-sodium 2-acrylamido-2-methyl-1-propanesulfonate copolymer
RL: DEV (Device component use); USES (Uses)
(interlayer; **photog.** material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)

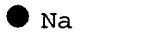
RN 154217-46-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

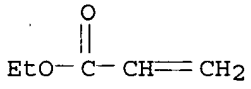
CRN 5165-97-9
CMF C7 H13 N O4 S . Na





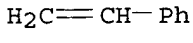
CM 2

CRN 140-88-5
CMF C5 H8 O2



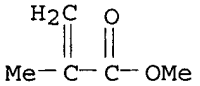
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03C001-76
ICS G03C001-04; G03C001-06; G03C001-295; G03C001-43; G03C005-29
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photomech silver halide photog** material; hydrazine deriv additive **photog** material; development inhibitor releasing redox **photog**; pyrazolone development inhibitor releaser **photog**; tetrazolylthiopyrazolone development inhibitor **photog** material; dextrin additive interlayer **photog** material
IT **Photographic** development
(developing **photog.** material containing hydrazine and development inhibitor releaser with low pH **solution**)
IT Lithographic films (**photographic**)
(**photog.** material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)
IT 141187-74-8 141704-03-2 189456-28-8 190077-86-2 190077-87-3
RL: DEV (Device component use); USES (Uses)
(development inhibitor releaser; **photog.** material containing hydrazine to enhance image contrast, and its processing)
IT 9003-05-8, Polyacrylamide 9004-53-9, Dextrin 9004-54-0, Dextran, uses 25586-20-3, Butyl acrylate-styrene-acrylic **acid** copolymer **154217-46-6**, Styrene-methyl methacrylate- ethyl acrylate-sodium 2-acrylamido-2-methyl-1-propanesulfonate copolymer 161717-07-3, Cyclohexyl methacrylate-isononyl acrylate-glycidyl methacrylate copolymer
RL: DEV (Device component use); USES (Uses)
(interlayer; **photog.** material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)
IT 180678-11-9 186522-16-7 199658-42-9
RL: DEV (Device component use); USES (Uses)
(nucleating agent; **photog.** material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)

L15 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:372622 CAPLUS
DOCUMENT NUMBER: 127:72953
TITLE: Imaging element capable of providing in single layer image and independent magnetic record

INVENTOR(S): Nair, Mridula; Oltean, George L.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 15 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5633127	A	19970527	US 1996-626228	19960329
GB 2311619	A1	19971001	GB 1997-6098	19970324
GB 2311619	B2	19991124		
JP 10020429	A2	19980123	JP 1997-81067	19970331

PRIORITY APPLN. INFO.: US 1996-626228 19960329

AB An imaging element is disclosed comprised of a support and, coated on the support, at least one radiation-sensitive emulsion layer containing radiation-sensitive **silver halide** grains and an **aqueous processing solution**-permeable vehicle, wherein the radiation-sensitive emulsion layer addnl. contains from 0.1 to 10 mg/dm2 of magnetic particles having a major axis less than 1 μm and, based on the weight of the magnetic particles, from 10 to 200% of an amphipathic dispersant for the magnetic particles having a hydrophilic/lipophilic balance number of at least 8.

IT **9080-79-9**, Poly(styrenesulfonic **acid**) sodium salt
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** and radiog. films with magnetic recording layers containing)

RN 9080-79-9 CAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50851-57-5
CMF (C8 H8 O3 S)x
CCI PMS

CM 2

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1— CH═ CH_2

D1— SO_3H

IC ICM G03C001-76
NCL 430496000
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photog** film magnetic record; radiog film magnetic record
IT **Photographic** films
Radiographic films
(capable of providing in single layer images and independent magnetic records)
IT Carnauba wax
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** and radiog. films with magnetic recording layers containing)
IT 1344-28-1, α-Alumina, uses **9080-79-9**, Poly(styrenesulfonic **acid**) sodium salt 51569-39-2, Olin 10G 119574-62-8, Syn Fac 8337
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** and radiog. films with magnetic recording layers containing)
IT 1309-37-1, Iron oxide (Fe2O3), uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** and radiog. films with magnetic recording layers containing cobalt-doped particles of)
IT 7440-48-4, Cobalt, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** and radiog. films with magnetic recording layers containing iron oxide particles doped with)

L15 ANSWER 20 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:356136 CAPLUS
DOCUMENT NUMBER: 127:25847
TITLE: Method for processing **silver halide photographic** material containing a polyamide with a reductone-containing developer to improve neutral black tone
INVENTOR(S): Yamashita, Yuji; Takahashi, Nariaki
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09080706	A2	19970328	JP 1995-240030	19950919

PRIORITY APPLN. INFO.: JP 1995-240030 19950919

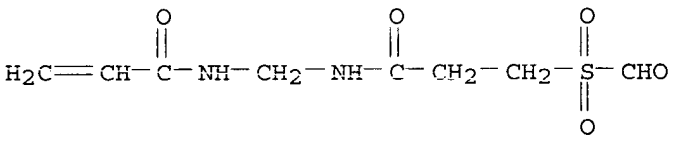
AB Claimed method for processing **Ag** halide **photog.** material is characterized by (1) that the **developer soln**. is an alkaline **solution** containing a reductone and (2) that the emulsion layer or other hydrophilic colloid layer contains a water-soluble synthetic or natural polymer represented by the formula [CH2CR1Ln(CONR2R3)m], (R1 = H, C1-6 alkyl; R2, R3 = H, C1-10 alkyl, aryl, aralkyl; R2, R3 may be combined to form a N-containing ring; L = bivalent linkage; n = 0, 1; m = 1, 2). It has high drying speed and maintains neutral black tone and good transparency even at rapid processing. It is insensitive to pressure application, too. Thus, a black-and-white film containing dextrin in the emulsion layer **processed** by a **developer soln**. containing erythorbic **acid** provided the image with mentioned advantages.

IT **189517-56-4**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(black-and-white **photog.** emulsion containing acrylamide-type polymer and/or water-**soluble** polymer using **developer** containing reductone)

RN 189517-56-4 CAPLUS
CN 2-Propenamide, N-[[[3-(formylsulfonyl)-1-oxopropyl]amino]methyl]-, polymer with 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

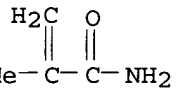
CM 1

CRN 189517-55-3
CMF C8 H12 N2 O5 S



CM 2

CRN 79-39-0
CMF C4 H7 N O



IC ICM G03C005-30
ICS G03C001-035; G03C001-04; G03C001-32; G03C001-95; G03C005-38; G03C005-395
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **silver halide photog** material print; black and white **photog** material; ascorbic **acid** developing agent **photog**; erythorbic **acid** developing agent **photog**; dextrin additive binder **photog** material; acrylamide copolymer additive **photog** material; styryl amide polymer **photog** material
IT **Photographic** emulsions
(black-and-white **photog.** emulsion containing acrylamide-type polymer and/or water-**soluble** polymer using **developer** containing reductone)
IT 89-65-6, Erythorbic **acid** 9003-05-8, Polyacrylamide 9004-53-9, Dextrin **189517-56-4**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(black-and-white **photog.** emulsion containing acrylamide-type polymer and/or water-**soluble** polymer using **developer** containing reductone)
IT 107-95-9, 3-Aminopropionic **acid** 503-66-2, 3-Hydroxypropionic **acid** 187032-81-1
RL: MOA (Modifier or additive use); USES (Uses)
(black-and-white **photog.** emulsion using developer containing reductone and fixing agent containing)

L15 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:715581 CAPLUS
DOCUMENT NUMBER: 126:39764
TITLE: **Processing solution** for **silver** salt diffusion transfer lithographic plate
INVENTOR(S): Kaneko, Akira; Saikawa, Masahiko
PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08262723	A2	19961011	JP 1995-69966	19950328
JP 3372391	B2	20030204		

PRIORITY APPLN. INFO.: JP 1995-69966 19950328

AB The **solution**, used for **processing** a lithog plate comprising a coarsened and anodized Al plate coated with a phys. development nucleus layer and with a **photosensitive Ag** halide emulsion layer, contains poly(styrene sulfonate) with average mo. weight ≤20,000. The **processing solution** shows good storage stability and gives lithog. plate with good ink receptivity.

IT **50851-57-5D**, Poly(styrene sulfonic **acid**), salts
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(**processing solution** containing poly(styrene sulfonate) for **silver** salt diffusion transfer lithog. plate)

RN 50851-57-5 CAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1— CH═ CH_2

D1— SO_3H

IC ICM G03F007-07
ICS B41N003-08

CC **74-6** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **processing soln** polystyrene sulfonate lithog; **silver** salt diffusion transfer lithog

IT Lithographic plates
(**processing solution** containing poly(styrene sulfonate) for **silver** salt diffusion transfer lithog. plate)

IT **50851-57-5D**, Poly(styrene sulfonic **acid**), salts
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(**processing solution** containing poly(styrene sulfonate) for **silver** salt diffusion transfer lithog. plate)

L15 ANSWER 22 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:262317 CAPLUS
DOCUMENT NUMBER: 124:356226

TITLE: **Photopolymerizable** compositions and their cured products
INVENTOR(S): Yokoshima, Minoru; Ookubo, Tetsuo; Sasahara, Kazunori
PATENT ASSIGNEE(S): Nippon Kayaku Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08041145	A2	19960213	JP 1994-193779	19940727

PRIORITY APPLN. INFO.: JP 1994-193779 19940727

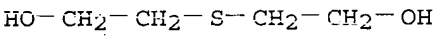
AB The title compns. **developable** with alkaline **solns.**, giving cured products, useful for solder resists with adhesion and resistance to solder heat and electroless **Ag** plating, contain (A) unsatd. group-containing polycarboxylic **acid** resins prepared by introducing onium salt-containing groups to residual glycidyl groups of compds. obtained by addition reaction of unsatd. monocarboxylic **acids** to a part of glycidyl groups of multifunctional epoxy resins followed by treating polybasic **acid** anhydrides, (B) **photopolymn.** initiators, and (C) diluents.

IT **176776-39-9P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic **acid** resins, **photopolymn.** initiators, and diluents)

RN 176776-39-9 CAPLUS
CN Ethanol, 2,2'-thiobis-, compd. with EOCN 1020 hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 111-48-8
CMF C4 H10 O2 S



CM 2

CRN 176776-37-7
CMF C8 H10 O4 . x C3 H4 O2 . x Unspecified

CM 3

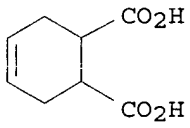
CRN 104841-49-8

CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

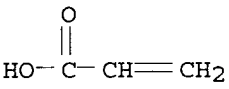
CM 4

CRN 88-98-2
CMF C8 H10 O4



CM 5

CRN 79-10-7
CMF C3 H4 O2



IC ICM C08F290-06
ICS C08G059-14; H05K003-18; H05K003-28
CC **74-5** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST epoxy resin unsatd monocarboxylic **acid** addn; onium salt group introduction epoxy resin; polybasic **acid** anhydride onium epoxy resin; **photopolymerizable** epoxy resin printed circuit; solder resist **photopolymerizable** epoxy resin
IT Epoxy resins, preparation
Phosphonium compounds
Quaternary ammonium compounds, preparation
Sulfonium compounds
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic **acid** resins, **photopolymn.** initiators, and diluents)
IT 82799-44-8, 2,4-Diethylthioxanthone
RL: TEM (Technical or engineered material use); USES (Uses)
(Kayacure DETX-S; **photopolymerizable** compns. containing unsatd. group-containing polycarboxylic **acid** resins, **photopolymn** . initiators, and diluents)
IT 176776-36-6P, EOCN 104S acrylate **176776-39-9P** 176776-41-3P

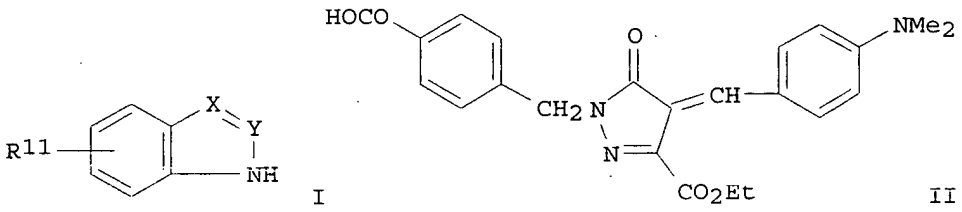
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic **acid** resins, **photopolymn.** initiators, and diluents)

IT 461-58-5, Dicyandiamide 28825-96-9, TEPIC 71868-10-5, Irgacure 907 77641-99-7, Kayarad DPHA 85305-70-0, EOCN 104S
RL: TEM (Technical or engineered material use); USES (Uses)
(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic **acid** resins, **photopolymn.** initiators, and diluents)

L15 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:248119 CAPLUS
DOCUMENT NUMBER: 124:356108
TITLE: **Silver halide photographic** materials and processing thereof
INVENTOR(S): Sakata, Hideaki; Atoyama, Hiroyuki; Muramatsu, Yasuhiko
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08015800	A2	19960119	JP 1994-152255	19940704

PRIORITY APPLN. INFO.: JP 1994-152255 19940704
OTHER SOURCE(S): MARPAT 124:356108
GI



AB The title materials contain a hydrazine derivative, a nucleation-promoting agent, a sulfonic **acid** group- or phosphoric **acid** group-containing water-soluble polymer, and hydrophilic colloid layers other than the **Ag** halide emulsion layers containing a fixed dye. The materials are processed at ≥30° with a **developing solution** containing a compound I (X, Y = N, :CR12, ≥1 of X and Y is

N; R11 = H, lower alkyl, halo, nitro; R12 = H, lower alkyl, halo, mercapto), ≥0.5 mL/L carbonate, and ≤20 g/L hydroquinone. The materials useful for platemaking provide high-contrast, low-fog images without black spots even if they are continuously processed by automatic **developing** machines using **developing solns.** of pH <11.0. Thus, a **photog.** film was prepared by using a **Ag** (Cl,Br) emulsion layer containing a hydrazine derivative, a nucleation-promoting agent, and Me acrylate-acrylamide-Na styrenesulfonate copolymer and a gelatin-based protective layer containing dye II which had been fixed.

IT **62744-35-8 64112-31-8 79042-20-9 134437-69-7 174459-44-0 174459-46-2 176673-46-4 176673-48-6**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** film containing fixed dye and polymer with sulfonic **acid** or phosphoric **acid** group)

RN 62744-35-8 CAPLUS
CN Benzenesulfonic acid, ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9
CMF C8 H8 O3 S . Na
CCI IDS

D1— CH═ CH_2

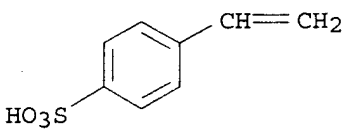
D1— SO_3H

● Na

RN 64112-31-8 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

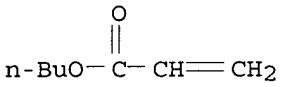
CM 1

CRN 4551-90-0
CMF C8 H8 O3 S . K



CM 2

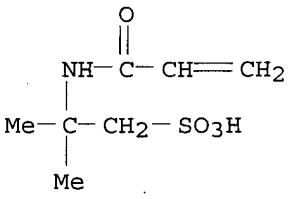
CRN 141-32-2
CMF C7 H12 O2



RN 79042-20-9 CAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

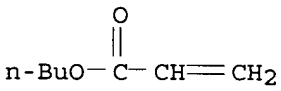
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



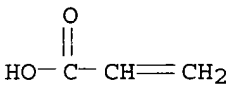
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



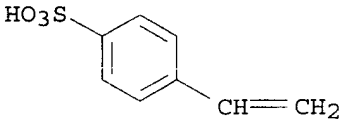
RN 134437-69-7 CAPLUS
CN 2-Butenedioic acid, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 6915-18-0
CMF C4 H4 O4

CM 2

CRN 2695-37-6
CMF C8 H8 O3 S . Na



RN 174459-44-0 CAPLUS
CN 2-Propenoic acid, methyl ester, polymer with 2-propenamide and sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9
CMF C8 H8 O3 S . Na
CCI IDS

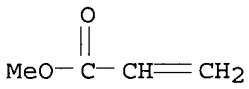
D1—CH═CH$_2$

D1—SO$_3$H

● Na

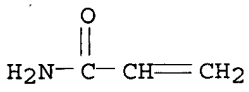
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

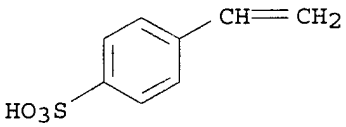
CRN 79-06-1
CMF C3 H5 N O



RN 174459-46-2 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

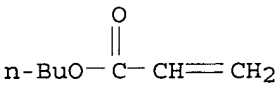
CM 1

CRN 4551-90-0
CMF C8 H8 O3 S . K



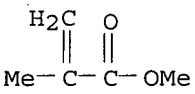
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



RN 176673-46-4 CAPLUS
CN 2-Butenedioic acid, polymer with butyl 2-propenoate and sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9
CMF C8 H8 O3 S . Na
CCI IDS

D1— CH═ CH_2

D1— SO_3H

● Na

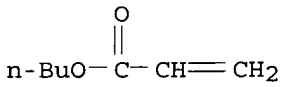
CM 2

CRN 6915-18-0
CMF C4 H4 O4

HO_2C— CH═ CH— CO_2H

CM 3

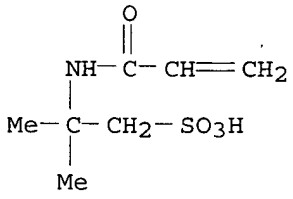
CRN 141-32-2
CMF C7 H12 O2



RN 176673-48-6 CAPLUS
CN 2-Butenedioic acid, polymer with butyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

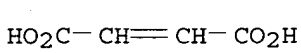
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



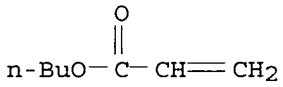
CM 2

CRN 6915-18-0
CMF C4 H4 O4



CM 3

CRN 141-32-2
CMF C7 H12 O2



IC ICM G03C001-06
ICS G03C001-035; G03C001-053; G03C001-295; G03C001-34; G03C001-43; G03C001-83; G03C005-29; G03C005-31

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **silver halide photog** material dye; water sol polymer **photog** material; developer **photog** heterocyclic compd

IT **Photographic** developers
(**photog.** developer containing heterocyclic compound and carbonate and hydroquinone)

IT **Photographic** films
(**photog.** film containing fixed dye and polymer with sulfonic **acid** or phosphoric **acid** group)

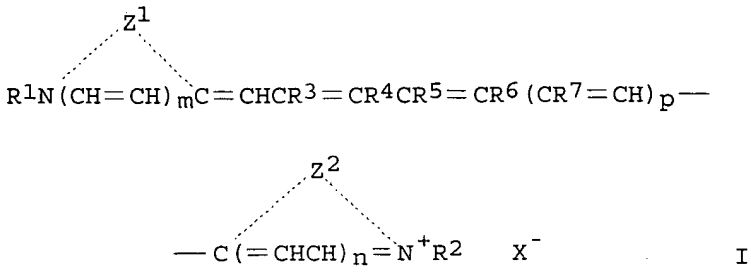
IT 51-17-2, Benzimidazole 95-14-7, 1H-Benzotriazole 136-85-6, 5-Methylbenzotriazole 584-08-7, Potassium carbonate 5401-94-5, 5-Nitroindazole 7597-18-4, 6-Nitroindazole 72572-18-0
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(**photog.** developer containing heterocyclic compound and carbonate and hydroquinone)

IT 123-31-9, Hydroquinone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** developer containing heterocyclic compound and carbonate and hydroquinone)
IT 176673-49-7 176673-50-0 176673-51-1 176673-52-2 176673-53-3 176673-54-4 176673-55-5
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** development inhibitor-releasing agent)
IT 923-06-8 2425-28-7 2623-87-2, 4-Bromobutanoic **acid** 4263-52-9 4870-65-9 32014-22-5 176673-56-6
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** emulsion containing bromide-releasing agent)
IT 124013-74-7 138652-16-1 159254-97-4 159805-02-4 160681-91-4 161239-90-3 162373-75-3 164982-03-0
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** emulsion containing hydrazine compound and nucleation-promoting agent)
IT **62744-35-8 64112-31-8** 64137-49-1 **79042-20-9** 117573-89-4 117574-10-4 125603-57-8 **134437-69-7** 137566-14-4 162397-73-1 163768-61-4 163768-62-5 173320-39-3 **174459-44-0 174459-46-2** 176673-42-0 176673-43-1 176673-44-2 176673-45-3 **176673-46-4** 176673-47-5 **176673-48-6** 176772-74-0
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(**photog.** film containing fixed dye and polymer with sulfonic **acid** or phosphoric **acid** group)

L15 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:545206 CAPLUS
DOCUMENT NUMBER: 121:145206
TITLE: **Silver halide photographic** materials with high sensitivity in IR region
INVENTOR(S): Morihara, Hideaki; Yoshida, Kazuhiro; Arai, Takeo
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06027567	A2	19940204	JP 1992-185267	19920713

PRIORITY APPLN. INFO.: JP 1992-185267 19920713
GI



I

AB The title materials comprise a support coated with ≥1 **Ag** halide emulsion layer containing ≥1 gelatin-stabilized polymer latex and spectrally sensitized with ≥1 dye I [R1, R2 = (substituted) alkyl, (substituted) aryl; R3-7 = H, alkyl, alkoxy, R3 and R5 or R4 and R6 may form a 5 or 6-membered ring; Z1, Z2 = nonmetallic atoms required to form a 5 or 6-membered N-containing heterocycle which may be substituted for halo or lower alkyl, alkoxy, alkoxycarbonyl, aryl, or OH groups; X- = anion; m, n, p = 0, 1]. The materials show high spectral sensitivity in IR region and prevent residual color staining after **development**, and the coating **solution** for the emulsion layer exhibits good storage stability.

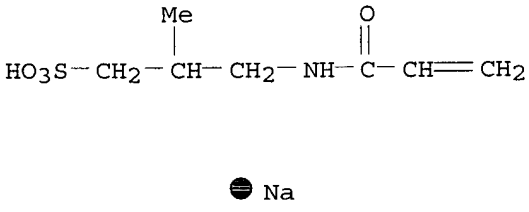
IT **157080-34-7P**
RL: PREP (Preparation)
(preparation of, gelatin-stabilized, **photog.** material containing)

RN 157080-34-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-methyl-3-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

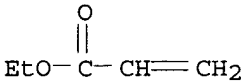
CM 1

CRN 144097-17-6
CMF C7 H13 N O4 S . Na



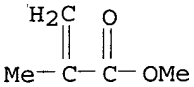
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



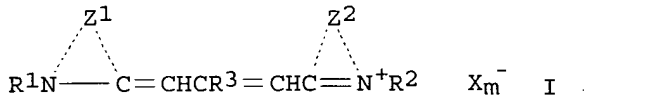
IC ICM G03C001-04
ICS C09B023-00; G03C001-20
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST gelatin polymer latex **photog** material; sensitizing dye **photog** material; IR sensitive **photog** material
IT **Photographic** sensitizers
(spectral, cyanine dyes, for IR sensitivity)
IT 51532-40-2 83846-69-9 94926-61-1 95235-08-8 95235-09-9 95889-43-3 96127-79-6 106986-41-8 116410-34-5 130754-56-2 130968-94-4 132796-83-9 136082-57-0 137590-41-1 137590-42-2 142031-05-8 148643-19-0 157108-38-8 157108-39-9 157108-40-2 157312-81-7
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** spectral sensitizer, for IR sensitivity)
IT 25586-20-3P, Acrylic **acid**-butyl acrylate-styrene copolymer **157080-34-7P**
RL: PREP (Preparation)
(preparation of, gelatin-stabilized, **photog.** material containing)

L15 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:521624 CAPLUS
DOCUMENT NUMBER: 121:121624
TITLE: **Silver halide photographic** materials with high sensitivity in red light regions
INVENTOR(S): Morihara, Hideaki; Yoshida, Kazuhiro; Arai, Takeo
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

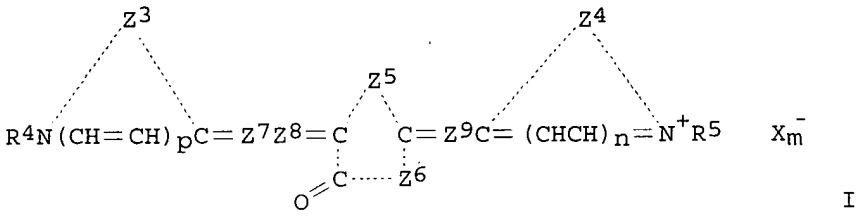
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06027568	A2	19940204	JP 1992-185268	19920713

PRIORITY APPLN. INFO.: JP 1992-185268 19920713

GI



I



I

AB The title materials comprise a support coated with ≥1 **Ag** halide emulsion layer containing ≥1 gelatin-stabilized polymer latex and spectrally sensitized with ≥1 dye selected from I [R1, R2 = alkyl, carboxyalkyl, sulfoalkyl; R3 = alkyl; Z1,Z2 = nonmetallic atoms required to form benzothiazole, benzoselenazole, naphthothiazole, or naphthoselenazole ring (the heterocycles may be substituted for halo or lower alkyl, alkoxy, alkoxycarbonyl, aryl, or OH groups); X- = anion; m = 0, 1, m = 0 when I forms an inner salt] and II [R4,R5 = alkyl, alkenyl, hydroxyalkyl, carboxyalkyl, sulfalkyl; Z3, Z4 = atoms required to form a 5 or 6-membered N-containing heterocycle conventionally used in cyanine dyes; Z5,Z6 = nonmetallic atoms required to form 4-thiazolidinone or 4-imidazolidinone ring; Z7-9 = methine group, Z7 and R4 or Z9 and R5 may link each other via methine chain; n, p = 0, 1]. The materials show high spectral sensitivity toward red light and prevent residual color staining after **development**, and the coating **solution** for the emulsion layer exhibits good storage stability.

IT **156696-56-9P**

RL: PREP (Preparation)

(preparation of, gelatin-stabilized, **photog.** material containing)

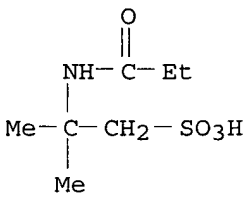
RN 156696-56-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-methyl-2-[(1-oxopropyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 67416-74-4

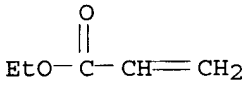
CMF C7 H15 N O4 S . Na



● Na

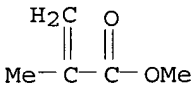
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03C001-04
ICS G03C001-047; G03C001-18
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST gelatin polymer latex **photog** material; sensitizing dye **photog** material; sensitivity red light **photog** film
IT **Photographic** sensitizers
(spectral, cyanine dyes, for red light sensitivity)
IT 18420-53-6 18426-56-7 34021-05-1 38395-13-0 38395-14-1
38395-15-2 38395-19-6 38395-30-1 38395-31-2 38395-32-3
38395-37-8 38408-71-8 38408-72-9 38756-69-3 47819-27-2
57206-44-7 64569-97-7 65860-85-7 81380-17-8 133088-89-8
145707-63-7 156696-26-3 156696-27-4 156696-28-5 156696-29-6
156696-31-0 156696-33-2 156696-35-4 156696-37-6 156696-38-7
156696-43-4 156696-44-5 156696-45-6 156696-47-8 156696-48-9

156696-49-0 156696-52-5 156696-55-8
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** spectral sensitizer, for red light sensitivity)
IT 25586-20-3P, Acrylic **acid**-butyl acrylate-styrene copolymer
156696-56-9P
RL: PREP (Preparation)
(preparation of, gelatin-stabilized, **photog.** material containing)

L15 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:204512 CAPLUS
DOCUMENT NUMBER: 120:204512
TITLE: Rapid processing of **silver halide** black-and-white **photographic** material using fixer containing nonionic surfactant to prevent **silver** stain
INVENTOR(S): Ito, Katsuhiko; Sanpei, Takeshi; Kato, Mariko; Aritomi, Juji
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05273711	A2	19931022	JP 1992-67300	19920325

PRIORITY APPLN. INFO.: JP 1992-67300 19920325

AB The claimed method for processing **photog.** materials having an elec. conductive layer on the back side of the support involves imagewise exposure, development and fixing, where the **developing solution** and/or fixing **solution** contains a nonionic surfactant. It does not generate **Ag** stains on rollers in processor or on the material with the anti-static backing.

IT **153921-97-2**
RL: USES (Uses)
(**photog.** material antistatic layer containing)
RN 153921-97-2 CAPLUS
CN 2-Butenedioic acid, polymer with sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9
CMF C8 H8 O3 S . Na
CCI IDS

D1— CH═ CH_2

D1— SO_3H

● Na

CM 2

CRN 6915-18-0
CMF C4 H4 O4

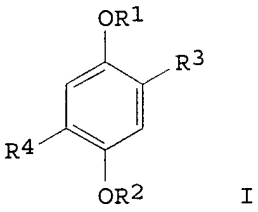
HO_2C— CH═ CH— CO_2H

IC ICM G03C005-38
ICS G03C001-85
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST antistatic conductive backing **photog** material; nonionic surfactant fixer **photog** processing
IT **Photographic** films
(antistatic, with elec. conductive layer)
IT **Photographic** developers
(containing nonionic surfactant, for automatic processor)
IT Saponins
RL: USES (Uses)
(**photog. processing solution** containing, for automatic **processor**)
IT Surfactants
(nonionic, **photog. processing solution** containing, for automatic **processor**)
IT **153921-97-2**
RL: USES (Uses)
(**photog.** material antistatic layer containing)
IT 60-33-3, Linoleic **acid**, uses 111-46-6, uses
RL: USES (Uses)
(**photog. processing solution** containing, for automatic **processor**)

L15 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:661495 CAPLUS
DOCUMENT NUMBER: 117:261495
TITLE: Method for processing **silver halide photographic** material
INVENTOR(S): Fujimoto, Hiroshi; Ishikawa, Takatoshi; Yoshida, Kazuaki; Yamanouchi, Junichi; Yasuda, Tomokazu
PATENT ASSIGNEE(S): Fuji Shashin Film K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04067037	A2	19920303	JP 1990-178449	19900705

PRIORITY APPLN. INFO.: JP 1990-178449 19900705
GI



I

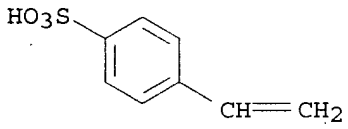
AB A **Ag** halide color **photog.** material containing at least one hydroquinone derivative (I; R1, R2 = C1-18 alkyl or alkenyl; R3, R4 = C1-18 alkyl) is processed, after imagewise exposure, by a color **developing solution** containing an aromatic primary amine developing agent and at least one H2O-soluble polymer containing repeating units having ≥1 anionic group(s). An overflow **solution** from a desilvering step is recycled. The method provides excellent processing stability of **photog.** properties, storage stability of magenta color images, and reduced yellow stain in continuous processing.

IT **25704-18-1 35641-59-9 144671-81-8 144671-82-9**
RL: USES (Uses)
(color developer containing, for continuous color **photog.** processing)

RN 25704-18-1 CAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6
CMF C8 H8 O3 S . Na

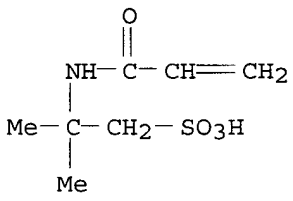


● Na

RN 35641-59-9 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9
CMF C7 H13 N O4 S . Na

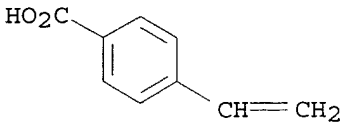


● Na

RN 144671-81-8 CAPLUS
CN Benzoic acid, 4-ethenyl-, sodium salt, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

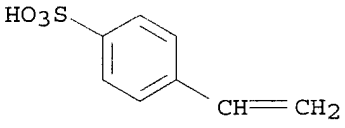
CRN 77124-40-4
CMF C9 H8 O2 . Na



● Na

CM 2

CRN 2695-37-6
CMF C8 H8 O3 S . Na

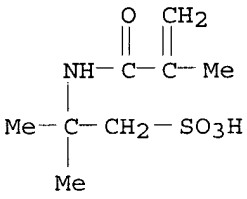


● Na

RN 144671-82-9 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

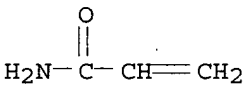
CRN 52825-47-5
CMF C8 H15 N O4 S . Na



● Na

CM 2

CRN 79-06-1
CMF C3 H5 N O



IC ICM G03C007-407
ICS G03C007-392; G03C007-44
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** processing; hydroquinone color **photog** paper; water **soluble** polymer color **developer**
IT **Photographic** processing
(of color **photog.** material containing hydroquinone derivs.)
IT **Photographic** paper
(color, containing hydroquinone derivs. as discoloration inhibitors)
IT **Photographic developers**
(color, containing water-**soluble** polymer)
IT 9003-01-4, Polyacrylic **acid** 9011-16-9 25087-26-7, Polymethacrylic **acid 25704-18-1 35641-59-9** 84872-31-1 108115-40-8 **144671-81-8 144671-82-9** 144719-04-0
RL: USES (Uses)
(color developer containing, for continuous color **photog.** processing)
IT 70544-46-6 76460-83-8 125904-18-9 127486-72-0 127486-73-1 143991-68-8 143991-69-9 143991-70-2 143991-71-3 143991-72-4 143991-73-5
RL: USES (Uses)
(discoloration inhibitor, color **photog.** material containing)

L15 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:581638 CAPLUS
DOCUMENT NUMBER: 117:181638
TITLE: Method for processing **silver halide** color **photographic** material
INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Ueda, Yutaka; Kawamura, Tomoki; Kida, Shuji
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 04022947 A2 19920127 JP 1990-126557 19900518
PRIORITY APPLN. INFO.: JP 1990-126557 19900518

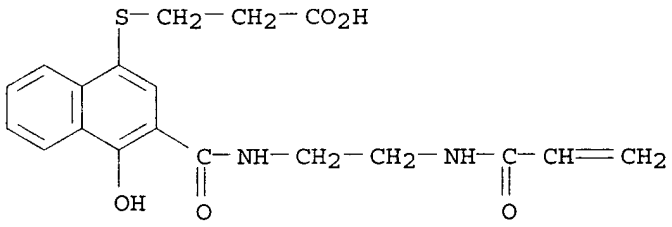
AB The title method involving color-development and bleaching-fixing process immediately after the development is characterized by uses of ≥1 timing moiety-containing compound or ≥1 specified compound, and a bleaching-fixing **solution** containing ≥1 organic **acid** Fe(III) complex salt as bleaching agent and at least **thiosulfate** ≥1 mol/L and thiocyanate ≥0.5 mol/L as fixing agents. This method is suitable for rapid processing, and gives good bleaching properties.

IT **124350-23-8 139700-68-8**
RL: USES (Uses)
(**silver halide** color **photog.** material containing, method for processing)

RN 124350-23-8 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with 3-[[4-hydroxy-3-[[[2-[(1-oxo-2-propenyl)amino]ethyl]amino]carbonyl]-1-naphthalenyl]thio]propanoic acid (9CI) (CA INDEX NAME)

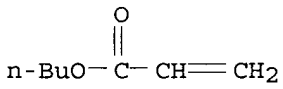
CM 1

CRN 122017-02-1
CMF C19 H20 N2 O5 S



CM 2

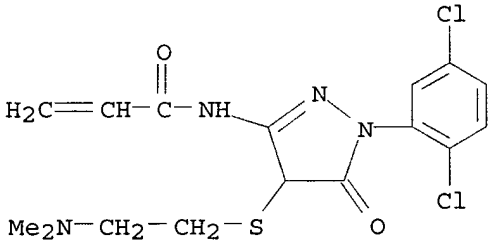
CRN 141-32-2
CMF C7 H12 O2



RN 139700-68-8 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with N-[1-(2,5-dichlorophenyl)-4-[[2-(dimethylamino)ethyl]thio]-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-propenamide (9CI) (CA INDEX NAME)

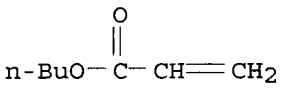
CM 1

CRN 139700-67-7
CMF C16 H18 Cl2 N4 O2 S



CM 2

CRN 141-32-2
CMF C7 H12 O2



IC ICM G03C007-42
ICS G03C007-305; G03C007-32
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **silver halide** color **photog** processing; bleaching fixing **photog** processing
IT **Photographic processing**
(rapid, bleaching-fixing **solution** for)
IT 29628-68-0 53321-94-1 73651-87-3 91154-97-1
RL: USES (Uses)
(bleaching agent, **solution** containing, **processing** of **silver halide** color **photog.** material by)
IT 1762-95-4 7783-18-8
RL: USES (Uses)
(fixing agent, **solution** containing, **processing** of **silver halide** color **photog.** material by)
IT 82620-19-7 115721-07-8 115721-09-0 115721-11-4 115721-12-5
116646-25-4 **124350-23-8** 124679-05-6 126198-47-8
126353-38-6 139695-61-7 139695-75-3 139695-76-4 **139700-68-8**
142339-98-8 143720-28-9 143720-29-0 143720-30-3 143720-31-4
143897-16-9
RL: USES (Uses)
(**silver halide** color **photog.** material containing, method for processing)

L15 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:540481 CAPLUS
DOCUMENT NUMBER: 117:140481
TITLE: Method for processing of **silver halide** color **photographic** material
INVENTOR(S): Fujimoto, Hiroshi; Yoshida, Kazuaki; Ishikawa, Takatoshi; Yamanouchi, Junichi; Yasuda, Tomokazu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04009945	A2	19920114	JP 1990-113637	19900427

PRIORITY APPLN. INFO.: JP 1990-113637 19900427

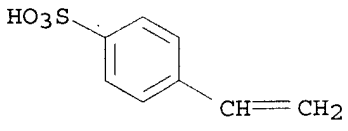
AB Color development of an imagewise-exposed **silver halide** color **photog.** material involves color development with a color **developer** containing a H2O-**soluble** polymer immediately followed by desilverization **process** with a desilverization **soln**. containing CO32- ion concentration 2.5 + 10-2 to 1.3 + 10-1 mol/L carried over from the color developer. ≥5.0 Weight% of a total gelatin coating in the color **photog.** material consists of **acid**-treated gelatin. The **photog.** processing can provide finished color images with glossy surface free from reticulation in rapid processing under low replenishing of the **processing solns.**

IT **25704-18-1 81998-89-2 143451-59-6**
RL: USES (Uses)
(**photog.** color developer containing, for rapid processing)

RN 25704-18-1 CAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6
CMF C8 H8 O3 S . Na

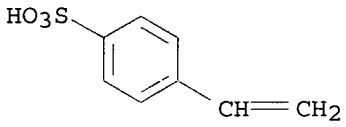


KOROMA EIC1700

RN 81998-89-2 CAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

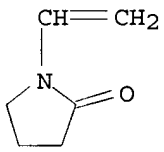
CM 1

CRN 2695-37-6
CMF C8 H8 O3 S . Na



CM 2

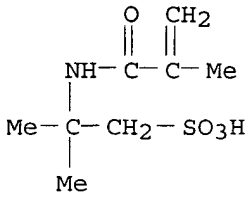
CRN 88-12-0
CMF C6 H9 N O



RN 143451-59-6 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, polymer with N-(2-hydroxyethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

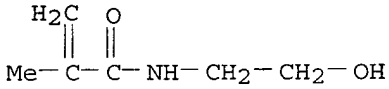
CM 1

CRN 21838-63-1
CMF C8 H15 N O4 S



CM 2

CRN 5238-56-2
CMF C6 H11 N O2



IC ICM G03C007-407
ICS G03C001-047; G03C007-42
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** material rapid processing; water **soluble** polymer color **developer**
IT **Photographic developers**
(color, containing water-**soluble** polymers, for prevention of reticulation)
IT 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic **acid**) 9003-05-8, Polyacrylamide 9003-39-8 9004-32-4, Carboxymethylcellulose 25322-68-3, Poly(ethylene oxide) **25704-18-1** 25751-21-7, Acrylic **acid**-methacrylic **acid** copolymer **81998-89-2** 114376-97-5 **143451-59-6**
RL: USES (Uses)
(**photog.** color developer containing, for rapid processing)

L15 ANSWER 30 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:479820 CAPLUS
DOCUMENT NUMBER: 117:79820
TITLE: Method for continuous processing **silver halide** color **photographic** material by color developer containing hydroxylamine derivative
INVENTOR(S): Ueda, Shinji; Nakajo, Kiyoshi; Fujimoto, Hiroshi; Kuraki, Yasuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03211547	A2	19910917	JP 1990-7321	19900117

PRIORITY APPLN. INFO.: JP 1990-7321 19900117
OTHER SOURCE(S): MARPAT 117:79820

AB A **Ag** halide color **photog.** material, containing at least each one kind of large rough particles (average particle size 2.0-7.0 μm) **soluble** in a **processing solution** and/or microparticles (average particle size 0.4-1.3 μm) insol. in the **processing solution** in at least one **nonphotosensitive** layer, is processed after exposure by a color developer containing an aromatic primary amine color developing agent and at least one HONR(LA) [L = (un)substituted alkylene; A = CO2H, SO3H, P(O)(OH)2, phosphinic **acid** residue, OH, (alkyl)amino, (alkyl)ammonium, (alkyl)carbamoyl, or (alkyl)sulfamoyl; R = H, (un)substituted alkyl].

IT **62136-18-9**, Methyl methacrylate-styrenesulfonic **acid** copolymer
RL: USES (Uses)
(microparticles, **photog.** materials containing)

RN 62136-18-9 CAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

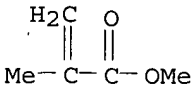
CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1-CH=CH2

D1-SO3H

CM 2

CRN 80-62-6
CMF C5 H8 O2



IC ICM G03C007-407
ICS G03C001-06
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** material continuous processing; color developer hydroxylamine deriv preservative
IT **Photographic** processing
(color)
IT **Photographic** developers
(color, containing hydroxylamine derivs. as preservatives)
IT 92-27-3, 2,3-Dihydroxynaphthalene-6-sulfonic **acid** 102-71-6, uses 149-46-2, 1,2-Dihydroxybenzene-3,5-disulfonic **acid** 156-87-6, 3-Amino-1-propanol 126920-75-0
RL: USES (Uses)
(color **photog.** developers containing)
IT 9003-32-1, Poly(ethyl acrylate) 9010-92-8, Methacrylic **acid** -styrene copolymer 9011-14-7, Poly(methyl methacrylate) 25014-41-9, Polyacrylonitrile 25086-15-1, Methyl methacrylate-methacrylic **acid** copolymer 25167-42-4, Glycidyl methacrylate-styrene copolymer 25767-39-9, Acrylic **acid**-methyl methacrylate-styrene copolymer 28133-04-2, Poly(phenyl acrylate) **62136-18-9**, Methyl methacrylate-styrenesulfonic **acid** copolymer 106971-83-9
RL: USES (Uses)
(microparticles, **photog.** materials containing)
IT 13782-57-5 50825-12-2 89531-79-3 95073-63-5 115750-72-6 134559-72-1 134559-73-2 134559-74-3 134559-76-5 137309-41-2 137309-42-3 137659-64-4 139723-37-8 142681-04-7
RL: USES (Uses)
(preservative, for color **photog.** developers)

L15 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1991:256866 CAPLUS
DOCUMENT NUMBER: 114:256866
TITLE: Rapid development - processing of **silver halide photographic** materials
INVENTOR(S): Takamukai, Yasuhiko; Hanyu, Takeshi
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02211445	A2	19900822	JP 1989-34237	19890213

JP 2799582 B2 19980917
PRIORITY APPLN. INFO.: JP 1989-34237 19890213

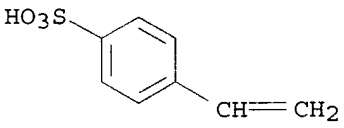
AB In the title development in which an elec. conductive layer containing a water-soluble polymer [-CH2CR(L-D(SO3M)n]x(A)y(B)z(C)w (R = H, halo, alkyl; A, B, C = different monomer units of a polymer copolymd. from ethylenic unsatd. monomers containing CO2H, its ester, or halo; x = 10-100, y = 0-90, z = 0-20, and w = 0-10 mol%; D = connective group, divalent connective group comprising C, N, S, O, and P; L = phenylene, heterocyclylene; M = H, ammonium ion, alkali ion; n = 1, 2) is formed on the side of a support opposite to that having **photosensitive** emulsion layers and then an antihalation layer comprising substantially gelatin or its derivative is formed on the elec. conductive layer, by using an automated **developing**-machine, the fixing **solution** used in the automated **developing**-machine having the function of hardening the antihalation layer and/or elec. conductive layer.

IT **57833-28-0 134119-91-8**
RL: USES (Uses)
(binders, **silver halide photog.** films with elec. conductive layers containing)

RN 57833-28-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

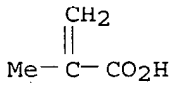
CM 1

CRN 2695-37-6
CMF C8 H8 O3 S . Na



CM 2

CRN 79-41-4
CMF C4 H6 O2



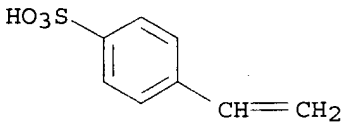
RN 134119-91-8 CAPLUS

KOROMA EIC1700

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

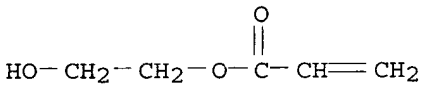
CRN 2695-37-6
CMF C8 H8 O3 S . Na



● Na

CM 2

CRN 818-61-1
CMF C5 H8 O3



IC ICM G03C005-38
ICS G03C001-825; G03C001-89
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photosensitive silver halide photog** material; **silver photog** rapid development processing; antihalation layer **photog** hardening agent; elec conducting layer **photog** hardener
IT **Photographic** films
(elec. conductive layers and antihalation layers using)
IT **Photographic processing**
(rapid, fixing **solns.** for)
IT **57833-28-0 134119-91-8**
RL: USES (Uses)
(binders, **silver halide photog.** films with elec. conductive layers containing)
IT 10043-01-3, Aluminum **sulfate**
RL: USES (Uses)
(**photog.** fixing **solns.** containing hardening agent of)

L15 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:133008 CAPLUS
DOCUMENT NUMBER: 114:133008
TITLE: Rapid color **photographic** development using developer containing poly(styrenesulfonic **acid**) derivative
INVENTOR(S): Kuze, Satoru; Koboshi, Shigeharu
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02188751	A2	19900724	JP 1989-9535	19890117
JP 2976110	B2	19991110		

PRIORITY APPLN. INFO.: JP 1989-9535 19890117

AB During the development of a **Ag** halide color **photog.** material using a **developing solution**, the **developing solution** contains at least 1 poly(styrenesulfonic **acid**) derivative and the developing time is <35 s.

IT **9080-79-9**
RL: USES (Uses)
(color **photog. developing solns.** containing)

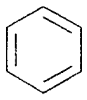
RN 9080-79-9 CAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50851-57-5
CMF (C8 H8 O3 S)x
CCI PMS

CM 2

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS



D1— CH═ CH_2

D1— SO_3H

IC ICM G03C007-407
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** developer polystyrene sulfonate; **silver** color **photog** development rapid
IT **Photographic** developers
(color, containing poly(styrenesulfonic **acid**) derivs.)
IT **Photographic** development
(color, rapid)
IT **9080-79-9**
RL: USES (Uses)
(color **photog. developing solns.** containing)

L15 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:641378 CAPLUS
DOCUMENT NUMBER: 113:241378
TITLE: Processing of **silver halide** color **photographic** material
INVENTOR(S): Kuze, Satoru; Koboshi, Shigeharu
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02103538	A2	19900416	JP 1988-260334	19881013

PRIORITY APPLN. INFO.: JP 1988-260334 19881013
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB In color developing a **Ag** halide color **photog.**

KOROMA EIC1700

material, the **Ag** halide color **photog.** material contains ≥1 compound selected from I [R, R1-5 = H, halo, OH, alkyl, alkoxy, SO3M, NHCH2SO3M; t = 1-3; M = cation], II [R1, R2 = H, alkyl, aryl, heterocyclyl; R3, R4 = OH, alkoxy, CN, CF3, CO2R8, CONHR8, NHCOR8, amino, (R8 = H, alkyl, aryl); L = methylene; n = 0, 1, 2; l, m = 0, 1], III [r = 1-3; W = O, S; L = methylene; R1-4 = H, alkyl, aryl, aralkyl, heterocyclyl, ≥1 is H], and IV (l = 1, 2; L = methylene; R1 = alkyl, aryl, heterocyclyl; R2 = OH, alkyl, alkoxy, CN, CF3, etc.; R3 = OZ1, NZ2Z3 (Z1, Z2, Z3 = H, alkyl); R4 = H, alkyl, Cl, alkoxy] and the color **developer solution** contains ≥1 styrenesulfonic **acid** derivative polymer. The background whiteness of the processed material is improved even by rapid processing.

IT **62744-35-8**
RL: USES (Uses)
(color **photog. developing solution** containing)

RN 62744-35-8 CAPLUS
CN Benzenesulfonic acid, ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9
CMF C8 H8 O3 S . Na
CCI IDS

D1— CH═ CH_2

D1— SO_3H

● Na

IC ICM G03C007-407
ICS G03C007-26; G03C007-392
ICA G03C001-06; G03C001-12; G03C001-83
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color processing **photog** rapid; background whiteness color processing; styrenesulfonic **acid** polymer color processing
IT **Photographic** developers
(containing styrenesulfonic **acid** derivative polymers)
IT **Photographic** processing

KOROMA EIC1700

(color, rapid)
IT **62744-35-8**
RL: USES (Uses)
(color **photog. developing solution** containing)
IT 6370-93-0 63059-36-9 79285-10-2 94421-79-1 127811-60-3
130878-08-9
RL: USES (Uses)
(color **photog.** material containing, for rapid processing)

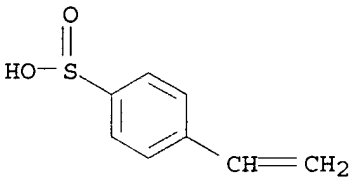
L15 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:242936 CAPLUS
DOCUMENT NUMBER: 112:242936
TITLE: Processing of **silver halide** color **photographic** material
INVENTOR(S): Ueda, Shinji; Morigaki, Masakazu; Koshimizu, Toshio
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01224762	A2	19890907	JP 1988-51237	19880304
JP 07066171	B4	19950719		

PRIORITY APPLN. INFO.: JP 1988-51237 19880304
AB A bleach-fixing **solution** containing an organic **acid** Fe(III) complex salt and sulfinic **acid** or its salt is used for processing of color **photog.** material. The sulfinic **acid** derivative is used as a preservative. The **photog.** material may contain ≥1 cyan dye-forming coupler (i.e. phenol type, naphthol type). Stability of bleach-fixing **solution** can be improved.
IT **120407-19-4**
RL: USES (Uses)
(preservative, bleach-fixing **solution** containing)
RN 120407-19-4 CAPLUS
CN Benzenesulfinic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 60081-74-5
CMF C8 H8 O2 S



IC ICM G03C007-42
ICS G03C007-34
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST sulfinic **acid** preservative; sulfinate preservative bleaching fixing **soln**; iron complex salt bleach
IT **Photographic processing**
(color, bleach-fixing **solution** containing iron(III) complex bleaching agent and sulfinate preservative for)
IT 21265-50-9 103690-85-3 104002-61-1 105011-26-5 105560-22-3
RL: USES (Uses)
(bleach-fixing **solution** containing, as bleaching agent)
IT 824-79-3 873-55-2 15898-38-1 16642-95-8 57267-75-1 93439-61-3 120405-31-4 **120407-19-4** 127427-63-8 127427-64-9 127427-65-0 127427-66-1
RL: USES (Uses)
(preservative, bleach-fixing **solution** containing)

L15 ANSWER 35 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:148956 CAPLUS
DOCUMENT NUMBER: 112:148956
TITLE: **Silver halide** color **photographic** material with stable color rendition and color images
INVENTOR(S): Furusawa, Genichi; Hirose, Takeshi; Hirano, Tsumoru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 72 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01186932	A2	19890726	JP 1987-295734	19871124

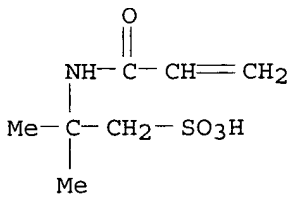
PRIORITY APPLN. INFO.: JP 1987-295734 19871124
AB The title **photog.** material possesses on a support a layer containing an emulsion based on a mixed **solution** containing ≥1 diffusion-resistant oleophilic coupler and an organic solvent-miscible copolymer containing repeating units containing **acidic** groups ≤30 mol%, the above layer showing a coupler concentration of 0.03-03 mmol/cm3 in a swollen state in a color **developer solution** and a

swelling degree of 100-300% in the color **developer soln**

IT **125870-92-0**
RL: USES (Uses)
(color **photog.** material using)
RN 125870-92-0 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with N-(1,1-dimethylethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

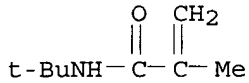
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



CM 2

CRN 6554-73-0
CMF C8 H15 N O



IC ICM G03C001-06
ICS G03C007-32; G03C007-34
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** film coupler concn
IT **Photographic** couplers
IT **Photographic** films
(for high color rendition and stable image formation)
IT **Photographic** emulsions
(swelling of)
IT 25322-25-2 101550-37-2 **125870-92-0**
RL: USES (Uses)
(color **photog.** material using)
IT 2923-93-5 20364-09-4 31037-84-0 65749-35-1 92589-17-8 93951-12-3 96758-05-3 101664-25-9 107444-89-3 108673-51-4 117827-06-2 117844-18-5
RL: TEM (Technical or engineered material use); USES (Uses)

(cyan **photog.** coupler)
IT 61368-52-3 104660-32-4 104660-33-5
RL: TEM (Technical or engineered material use); USES (Uses)
(magenta **photog.** coupler)
IT 54942-74-4 55697-63-7 95050-16-1
RL: USES (Uses)
(yellow **photog.** coupler)

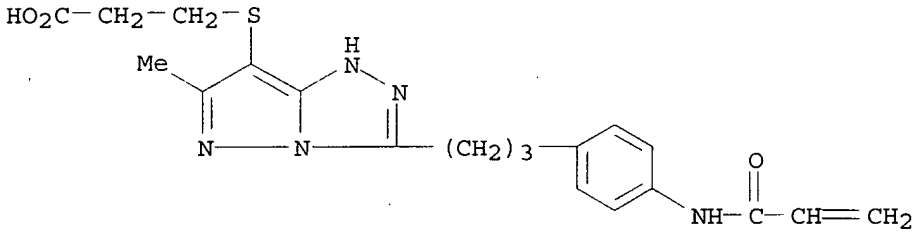
L15 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:148941 CAPLUS
DOCUMENT NUMBER: 112:148941
TITLE: Method for processing **silver halide** color **photographic** material
INVENTOR(S): Sakanoue, Kei
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 100 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 330936	A2	19890906	EP 1989-102803	19890217
EP 330936	A3	19900530		
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 01213650	A2	19890828	JP 1988-37701	19880220
US 5114835	A	19920519	US 1989-313008	19890221

PRIORITY APPLN. INFO.: JP 1988-37701 19880220
AB A method for processing an imagewise exposed **Ag** halide color **photog.** material containing ≥1 compound capable of reacting with an oxidation product of a developing agent to release a bleaching accelerator involves treating the material after **development** with a **processing solution** having bleaching ability and containing ≥1 ferric complex of a polycarboxylic amino **acid** selected from EDTA, dialkylenetriaminepentacetic **acid**, cyclohexanediaminetetraacetic **acid**, and 1,2-propylene-diaminetetraacetic **acid** and a ferric complex salt of 1,3-diaminopropanetetraacetic **acid** in a molar ratio of ≤3 as the bleaching agents.
IT **125976-27-4**
RL: USES (Uses)
(**photog.** bleaching accelerator-releasing compound, color **photog.** material containing)
RN 125976-27-4 CAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with 3-[[6-methyl-3-[3-[4-[(1-oxo-2-propenyl)amino]phenyl]propyl]-1H-pyrazolo[5,1-c]-1,2,4-triazol-7-yl]thio]propanoic acid (9CI) (CA INDEX NAME)

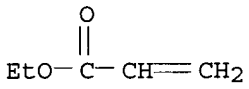
CM 1

CRN 122051-06-3
CMF C20 H23 N5 O3 S



CM 2

CRN 140-88-5
CMF C5 H8 O2



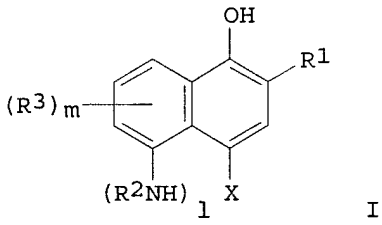
IC ICM G03C007-32
ICS G03C007-42
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog processing** bleaching **soln**; polycarboxylic amino **acid** ferric complex
IT **Photographic processing**
(color, bleaching **solns.** for, containing polycarboxylic amino **acid** and polycarboxylic amino **acid** ferric complex)
IT Amino **acids**, compounds
RL: USES (Uses)
(polycarboxylic, iron complexes, **photog.** bleaching **solns.** containing, for color materials containing bleaching accelerator-releasing compound)
IT 1939-36-2, 1,3-Diaminopropanetetraacetic **acid** 21265-50-9 85959-68-8 103690-85-3 104002-61-1 111687-36-6
RL: USES (Uses)
(color **photog.** bleaching **solns.** containing, for use with color materials containing bleaching accelerator-releasing compound)
IT 87947-03-3 105488-33-3 105504-92-5 121941-09-1 124898-01-7 **125976-27-4**
RL: USES (Uses)
(**photog.** bleaching accelerator-releasing compound, color **photog.** material containing)

L15 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:644121 CAPLUS
DOCUMENT NUMBER: 111:244121
TITLE: Processing of **silver halide** color **photographic** material with improved decoloring and cyan stain
INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Kuze, Satoru
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 64000953	A2	19890105	JP 1987-156038	19870623

PRIORITY APPLN. INFO.: JP 1987-156038 19870623
GI



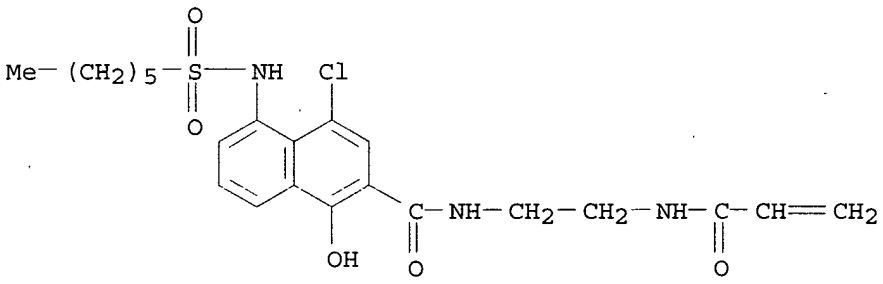
I

AB The processing of a color **photog.** material containing a coupler of the structure I [R1 = CONR4R5, NHCOR4, NHCO2R6, NHSO2R6, NHCONR4R5, NHSO2NR4R5; R2 = a monovalent group; R3 = a substituent; X = H, a group to be released upon reaction with an oxidized aromatic primary amine developer; l = 0, 1; m = 3; R4, R5 = H, aromatic group, aliphatic group, or heterocyclyl; R6 = an aromatic group, aliphatic group, or heterocyclyl] comprises (a) color **development**, (b) bleaching with a **solution** containing an Fe(III) complex salt of a compound of the formula (R11L1)(R12N2)NLN(L3R13)(L1R14) and/or R15L5N(L6R16)(L7R17) [L = alkylene, cycloalkylene, phenylene, L8OL8OL8, L9ZL9; Z = NL10R18, N(L12R19)L11N(12R19), NR20, N(R21)L13N(R21); L1-L13 = alkylene; R11-R21 = H, OH, carboxylic **acid** (or carboxylate), sulfonic **acid** (or sulfonate)], and (c) treatment with an alkali bath (pH ≥ 8.0).
IT **122779-74-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** cyan coupler, processing of color material containing)
RN 122779-74-2 CAPLUS
CN 2-Propenoic acid, polymer with 4-chloro-5-[(hexylsulfonyl)amino]-1-hydroxy-N-[2-[(1-oxo-2-propenyl)amino]ethyl]-2-naphthalenecarboxamide and methyl

2-propenoate (9CI) (CA INDEX NAME)

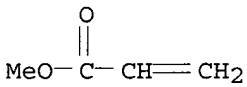
CM 1

CRN 122779-73-1
CMF C22 H28 Cl N3 O5 S



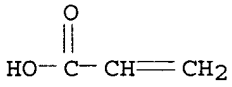
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



IC ICM G03C007-30
ICS G03C007-26; G03C007-34
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST iron complex salt bleach **photog**; processing color **photog** material
IT **Photographic processing**
(color, bleach **solution** containing iron(III) complex salt for)
IT 16448-54-7 21265-50-9 51181-50-1 85959-68-8 103690-85-3

KOROMA EIC1700

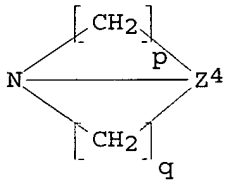
104002-61-1 105057-82-7 105832-26-6 111687-36-6 119501-88-1
122792-17-0
RL: USES (Uses)
(**photog.** bleach **solution** containing)

IT 39163-92-3 101820-05-7 101820-11-5 109625-49-2 109904-57-6
109904-61-2 110928-56-8 111360-24-8 115625-84-8 115657-51-7
115657-53-9 115825-96-2 **122779-74-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** cyan coupler, processing of color material containing)

L15 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:487286 CAPLUS
DOCUMENT NUMBER: 111:87286
TITLE: Processing of **silver halide** color **photographic** materials
INVENTOR(S): Ueda, Shinji; Sakagami, Megumi; Kobayashi, Hidetoshi; Ichijima, Yasushi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63261362	A2	19881028	JP 1987-95433	19870420
JP 08033643	B4	19960329		

PRIORITY APPLN. INFO.: JP 1987-95433 19870420
GI



I

AB In the claimed processing method, color **photog.** **photosensitive** materials containing a compound which releases a bleaching-promoting agent upon reaction with an oxidized developing agent is color-**developed** in a **developer solution** which does not contain sulfite ion-releasing compds. The **developer solution** preferably contains ≥1 compound selected from amines RNR1ZCO2H (R, R1 = H, alkyl; Z = alkylene), R2NR3R4 (R2, R3, R4 = H, alkyl, alkenyl, aryl, aralkyl, heterocyclyl; two of the R2, R3, and R4 may combine to form a heterocycle), R5NR6Z1Xn(Z2X1)mZ3NR7R8 (R5-R8 = H, alkyl; Z1-Z3 = alkylene; X, X1 = NR9, O, S, CO, SO2, SO; R9 =

H, alkyl; n, m = 0, 1, 2, 3), and I (Z4 = trivalent group needed to complete the condensed ring; p = 0-4; q = 1-5). The developer may also contain ≥1 compound selected from hydrazines, hydrazides, and hydroxylamines. The method improves bleaching without degrading other **photog.** characteristics.

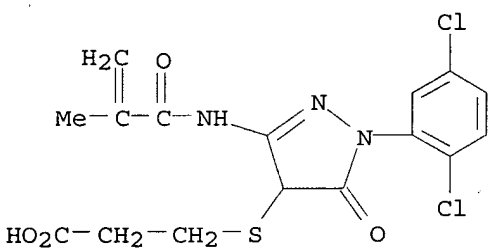
IT **121934-19-8**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** coupler, bleach promotor-releasing)

RN 121934-19-8 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 3-[[1-(2,5-dichlorophenyl)-4,5-dihydro-3-[(2-methyl-1-oxo-2-propenyl)amino]-5-oxo-1H-pyrazol-4-yl]thio]propanoic acid and ethenylbenzene (9CI) (CA INDEX NAME)

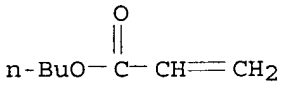
CM 1

CRN 121934-18-7
CMF C16 H15 Cl2 N3 O4 S



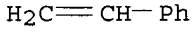
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 100-42-5
CMF C8 H8



IC ICM G03C007-42

KOROMA EIC1700

ICS G03C007-26
ICA G03C007-32
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** developer additive amine; bleaching promotion color **photog**
IT **Photographic** couplers
(bleach promotor-releasing)
IT **Photographic** processing
(color, bleach promotion in)
IT **Photographic** developers
(color, sulfite-free, additives for)
IT 56-86-0, L-Glutamic **acid**, uses and miscellaneous 102-71-6, uses and miscellaneous 110-18-9, N,N,N',N'-Tetramethylethylenediamine 111-40-0, Diethylenetriamine 140-82-9 280-57-9, 1,4-Diazabicyclo[2.2.2]octane 479-59-4 996-98-5 1118-68-9 1615-80-1, N,N'-Diethylhydrazine 1619-34-7, 1-Azabicyclo[2.2.2]octan-3-ol 3018-41-5 3710-84-7, Diethylhydroxylamine 6415-12-9, Tetramethylhydrazine 6674-22-2 6917-37-9 7738-38-7 21520-79-6 66003-61-0 105384-29-0 114478-07-8 120583-50-8 121933-74-2 121933-75-3 121933-76-4
RL: USES (Uses)
(**photog.** color **developer solution** containing, sulfite-free)
IT 105504-92-5 120069-45-6 121605-08-1 121605-10-5 121817-02-5 121933-65-1 121933-66-2 121933-73-1 **121934-19-8** 123472-13-9
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** coupler, bleach promotor-releasing)

L15 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:202729 CAPLUS
DOCUMENT NUMBER: 110:202729
TITLE: Method for processing **silver halide** color **photographic** light-sensitive materials with sulfinic **acid**-containing **solution** for stain-free images
INVENTOR(S): Morigaki, Masakazu; Ishikawa, Takatoshi; Andoh, Kazuto; Seto, Nobuo; Ueda, Shinji; Koshimizu, Toshio
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 125 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 294769	A2	19881214	EP 1988-109074	19880607
EP 294769	A3	19891123		
EP 294769	B1	19940302		

R: DE, FR, GB

JP 01230039	A2	19890913	JP 1988-136724	19880603
JP 07119981	B4	19951220		
US 5006456	A	19910409	US 1988-202558	19880606

PRIORITY APPLN. INFO.: JP 1987-142941 19870608
JP 1987-280810 19871106

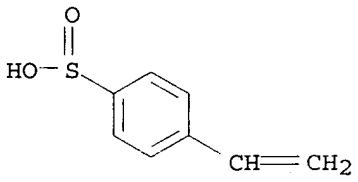
AB In a color **photog.** material processing method which comprises **development** with a **solution** containing an aromatic primary amine, desilvering, washing and/or stabilizing, ≥1 **processing solution** containing ≥1 compound selected from sulfinic **acids**, their salts, or their precursors is used. This method effectively prevents stain formation due to not only to the **photog.** emulsion but also the **processing solns.** Thus, a multilayer color **photog.** paper was processed with wash water containing Na benzenesulfinate. The processed paper was free of stain.

IT **120407-19-4**
RL: USES (Uses)
(**photog. processing solution** containing, for stain prevention)

RN 120407-19-4 CAPLUS
CN Benzenesulfinic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 60081-74-5
CMF C8 H8 O2 S



IC ICM G03C007-30
ICS G03C007-42; G03C007-40

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST sulfinic **acid photog** processing stain

IT **Photographic processing**
(color, with **solution** containing sulfinic **acid**, for stain prevention)

IT 824-79-3 873-55-2, Benzenesulfinic **acid** sodium salt 15959-31-6 16642-95-8 93439-61-3 116008-37-8, Pyridine-4-sulfinic **acid** sodium salt 120405-27-8 120405-28-9 120405-29-0 120405-30-3 120405-31-4 120405-32-5 120405-33-6 120405-34-7 **120407-19-4**
RL: USES (Uses)
(**photog. processing solution** containing, for stain prevention)

L15 ANSWER 40 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1988:446009 CAPLUS
DOCUMENT NUMBER: 109:46009
TITLE: Color **photographic** image formation by rapid processing
INVENTOR(S): Hirai, Hiroyuki; Yabuki, Yoshiharu; Iwano, Haruhiko
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Ger. Offen., 77 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3705139	A1	19870820	DE 1987-3705139	19870218
DE 3705139	C2	19920227		
JP 63011940	A2	19880119	JP 1986-257463	19861029
JP 07046218	B4	19950517		
JP 63023149	A2	19880130	JP 1986-257464	19861029
GB 2186987	A1	19870826	GB 1987-3612	19870217
GB 2186987	B2	19900110		
US 4791048	A	19881213	US 1987-16591	19870219

PRIORITY APPLN. INFO.: JP 1986-34895 19860219
JP 1986-56477 19860314
JP 1986-70055 19860328
JP 1986-257463 19861029

AB A process for the formation of a color image with sufficient color d. within a short processing or development time while at the same time showing improved stability of the **developer solution** uses a **Ag** halide **photog.** material containing a **photosensitive Ag** halide, a 2-equiv coupler, a binder, and an essentially water-insol. basic metallic compound and a **processing** or **developer solution** containing a complexing agent that reacts with the metal of the water-insol. basic compound to form a complex and free the base. Thus, a paper support was coated with a yellow coupler-containing gelatin-**Ag**(Br,Cl) emulsion layer and a layer containing gelatin and basic Zn carbonate. The resultant material was then exposed, color **developed** in an **aqueous solution** containing tri-Na nitrilotriacetate, benzyl alc., diethylene glycol, Na2SO3, hydroxylamine hydrogen **sulfate**, K picolinate, and N-ethyl-N-(β-methanesulfonamidoethyl)-3-methyl-4-aminoaniline hydrogen **sulfate**, bleach-fixed, and washed to show a Dmin (yellow) of 0.11 and a Dmax (yellow) of 1.9.

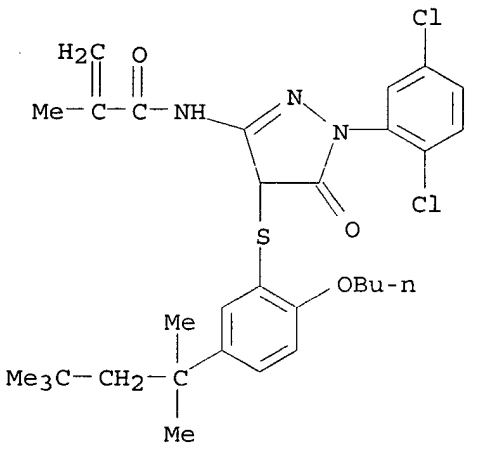
IT **115042-83-6**
RL: USES (Uses)
(**photog.** two-equivalent magenta coupler, color materials containing, for rapid processing)

RN 115042-83-6 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with N-[4-[[2-butoxy-5-(1,1,3,3-

tetramethylbutyl)phenyl]thio]-1-(2,5-dichlorophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

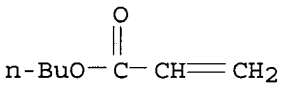
CM 1

CRN 115042-82-5
CMF C31 H39 Cl2 N3 O3 S



CM 2

CRN 141-32-2
CMF C7 H12 O2



IC ICM G03C007-30
ICS G03C007-26; G03C007-32
ICA G03C007-42; G03C007-34; G03C007-36; G03C007-38
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** paper rapid processing; film color **photog** rapid processing
IT **Photographic** paper
(color, containing water-insol. basic metallic compound for high image d.)
IT **Photographic** development
Photographic processing
(color, rapid, of water-insol. basic metallic compound-containing materials)
IT **Photographic** couplers
(two-equivalent)
IT 115301-95-6

RL: USES (Uses)
(color materials containing, for rapid processing)

IT 583-52-8 25108-36-5, Potassium picolinate 56744-33-3 57665-05-1, Sodium picolinate 115317-01-6
RL: USES (Uses)
(color **photog.** developer containing, for rapid processing of water-insol. basic metallic compound-containing materials)

IT 471-34-1, Calcium carbonate, uses and miscellaneous 1314-13-2, Zinc oxide, uses and miscellaneous 10476-83-2D, basic 20427-58-1, Zinc hydroxide
RL: USES (Uses)
(color **photog.** paper containing, rapid development of, in developer containing complexing agent)

IT 96758-05-3 115317-02-7
RL: USES (Uses)
(**photog.** two-equivalent cyan coupler, color materials containing water-insol. basic metallic compound and, rapid processing of)

IT 31037-84-0 76379-54-9 103425-88-3 115301-93-4 115301-94-5 115317-04-9 115317-05-0
RL: USES (Uses)
(**photog.** two-equivalent cyan coupler, color materials containing, for rapid processing)

IT 85888-24-0
RL: USES (Uses)
(**photog.** two-equivalent magenta coupler, color materials containing water-insol. basic metallic compound and, rapid processing of)

IT 54919-30-1 76379-53-8 89035-11-0 92991-05-4 104166-82-7 **115042-83-6**
RL: USES (Uses)
(**photog.** two-equivalent magenta coupler, color materials containing, for rapid processing)

IT 70950-45-7 72494-15-6 92683-20-0 93802-86-9 115317-03-8
RL: USES (Uses)
(**photog.** two-equivalent yellow coupler, color materials containing water-insol. basic metallic compound and, rapid processing of)

L15 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:431117 CAPLUS
DOCUMENT NUMBER: 107:31117
TITLE: Color **photographic** processing method
INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Miyaoka, Kazuyoshi; Kuze, Satoru
PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 61261741 A2 19861119 JP 1985-105390 19850515
JP 06058518 B4 19940803
PRIORITY APPLN. INFO.: JP 1985-105390 19850515

AB A **Ag** halide color **photog. photosensitive** material containing core-shell type emulsions with ≥3 mol % AgI and ≥1 polymeric coupler is color- **developed** by adding a replenishing **solution** containing ≤3.0 + 10-3 mol bromide/L to the color **developer solution** at a rate of ≤9 mL/100 cm2 of the **photosensitive** material processed. The color **developer solution** containing carboxylic **acid**, phosphoric **acid**, or OH-substituted arom or heterocyclic compound is preferably used for the above process. The method reduces development fluctuations and also reduces pollution.

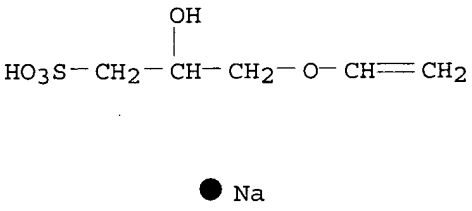
IT **104603-61-4 108854-86-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** coupler, development latitude in relation to)

RN 104603-61-4 CAPLUS

CN 2-Naphthalenecarboxylic acid, 4-fluoro-1-hydroxy-, 2-(2-methyl-1-oxo-2-propenyl)hydrazide, polymer with 3-(ethenyloxy)-2-hydroxy-1-propanesulfonic acid monosodium salt and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

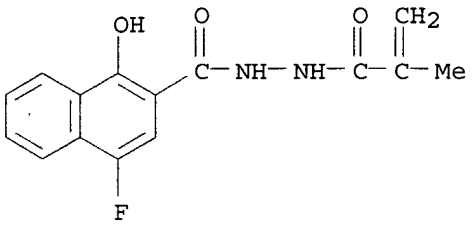
CM 1

CRN 104603-60-3
CMF C5 H10 O5 S . Na



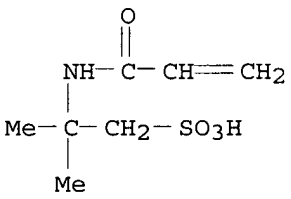
CM 2

CRN 104603-59-0
CMF C15 H13 F N2 O3



CM 3

CRN 5165-97-9
CMF C7 H13 N O4 S . Na

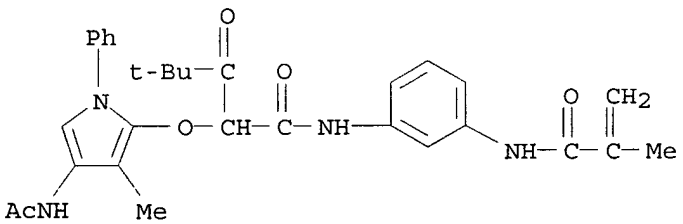


● Na

RN 108854-86-0 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-[[4-(acetylamino)-3-methyl-1-phenyl-1H-pyrrol-2-yl]oxy]-4,4-dimethyl-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-3-oxopentanamide (9CI) (CA INDEX NAME)

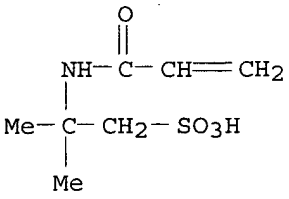
CM 1

CRN 108854-85-9
CMF C30 H34 N4 O5



CM 2

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



IC ICM G03C007-30
ICS G03C007-26
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color development **photog**
IT **Photographic** couplers
(polymeric, development latitude in relation to)
IT **Photographic** emulsions
(**silver halide**, iodide contents in, developing latitude in relation to)
IT **Photographic** developers
(color, containing chelating agent)
IT **Photographic development**
(color, replenishing **solution** addition in)
IT 67-43-6 139-13-9 149-46-2 2809-21-4 35998-29-9
RL: USES (Uses)
(chelating agent, **photog.** color **developer solution** containing)
IT 85557-63-7 **104603-61-4 108854-86-0** 108926-63-2
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** coupler, development latitude in relation to)

L15 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:600413 CAPLUS
DOCUMENT NUMBER: 105:200413
TITLE: **Silver halide photosensitive** materials and their reducing treatment
INVENTOR(S): Kasama, Yasuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61061146	A2	19860328	JP 1984-182457	19840831

PRIORITY APPLN. INFO.: JP 1984-182457 19840831

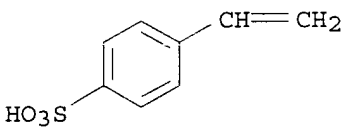
AB **Ag** halide **photog.** materials contain ≥1 **photosensitive Ag** halide emulsion layer (A) and ≥1 **nonphotosensitive** upper layer (B), where ≥1 B is hardened with a polymer hardening agent so as to have a greater melting time than A and ≥1 A contains a polymer containing repeating units of monomers having functional groups crosslinkable with gelatin. **Ag** images obtained by exposing/developing the materials are reduced by treating with a reducing **solution** intercalating through B. Thus, a **Ag** halide **photog.** material was prepared by using an emulsion layer containing a polymer having the repeating unit-[CH2CH(p-C6H4SO2K)]- and a polymer hardening agent(I) having the repeating units -[CH2CH(CONHCMe2CH2SO3Na)]x- and -[CH2CH(CONHCH2NHCOCH2CH2SO2CH:CH2)]y- (x:y = 3:1). Melting times of A and B were 680 and 1250 s, resp. Dot images obtained by using the material were soaked in a reducing **solution** cong. Ce(SO4)2 and H2SO4, showing 13.0% reduction, while a material prepared similarly without I (melting times of A and B were 680 s and 760 s) showed only 10.0% reduction

IT **26949-28-0 81998-90-5 85899-49-6 105060-37-5**
RL: USES (Uses)
(**nonphotosensitive** upper layer containing, for lith **silver halide photog.** materials, treatment for reduction of dot images from)

RN 26949-28-0 CAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

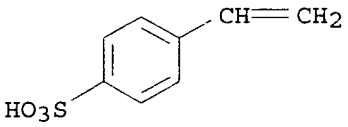
CRN 4551-90-0
CMF C8 H8 O3 S . K



RN 81998-90-5 CAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

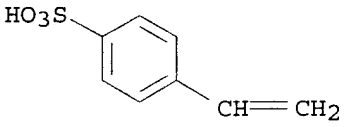
CM 1

CRN 4551-90-0
CMF C8 H8 O3 S . K



CM 2

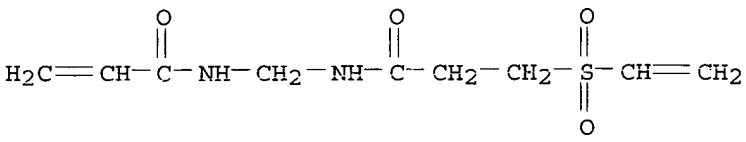
CRN 2695-37-6
CMF C8 H8 O3 S . Na



RN 85899-49-6 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-[[[3-(ethenylsulfonyl)-1-oxopropyl]amino]methyl]-2-propenamide (9CI) (CA INDEX NAME)

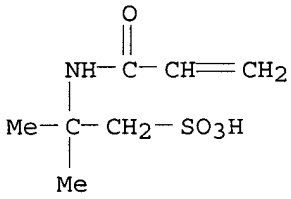
CM 1

CRN 85888-78-4
CMF C9 H14 N2 O4 S



CM 2

CRN 5165-97-9
CMF C7 H13 N O4 S . Na

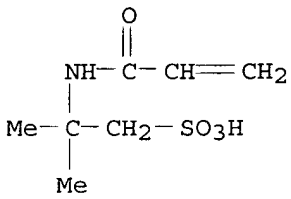


● Na

RN 105060-37-5 CAPLUS
CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

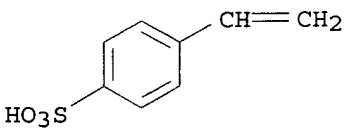
CRN 5165-97-9
CMF C7 H13 N O4 S . Na



● Na

CM 2

CRN 4551-90-0
CMF C8 H8 O3 S . K



● K

IC ICM G03C001-30
ICS G03C001-04
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **silver halide photog** material redn; **nonphotosensitive** upper layer **photog** material; polymer hardening agent **photog** material
IT Lithography
(**silver halide photog.** materials with **nonphotosensitive** upper layer containing polymer additives for, treatment for reduction of dot images from)
IT **Photographic** films
(lith, **nonphotosensitive** upper layer hardened with polymeric hardening agent, treatment for reduction of dot images from)
IT **26949-28-0 81998-90-5 85899-49-6 105060-37-5**
RL: USES (Uses)
(**nonphotosensitive** upper layer containing, for lith **silver halide photog.** materials, treatment for reduction of dot images from)
IT 7664-93-9, uses and miscellaneous
RL: USES (Uses)
(**photog. processing solution** containing cesium **sulfate** and, for reduction of dot images from lith **photog** . materials)
IT 10294-54-9
RL: USES (Uses)
(**photog. processing solution** containing sulfuric **acid** and, for reduction of dot images from lith **photog.** materials)

L15 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:196903 CAPLUS
DOCUMENT NUMBER: 104:196903
TITLE: **Silver halide** color **photographic** materials for processing without water washing
INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Kuze, Satoru
PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60239748	A2	19851128	JP 1984-95611	19840515
JP 05083899	B4	19931130		

PRIORITY APPLN. INFO.: JP 1984-95611 19840515

AB The claimed **photog.** material containing ≥1 kind of polymer coupler (prepared by polymerization of a monomer coupler). The **photog.** processing includes color **development**, **processing** with a **solution** having fixing capability (e.g., containing a **thiosulfate** salt), and treatment with a **photog.** stabilizer. In the stabilizing process the **thiosulfate** salt concentration in the last bath may be at 2 + 10-5-5 + 10-3 M.

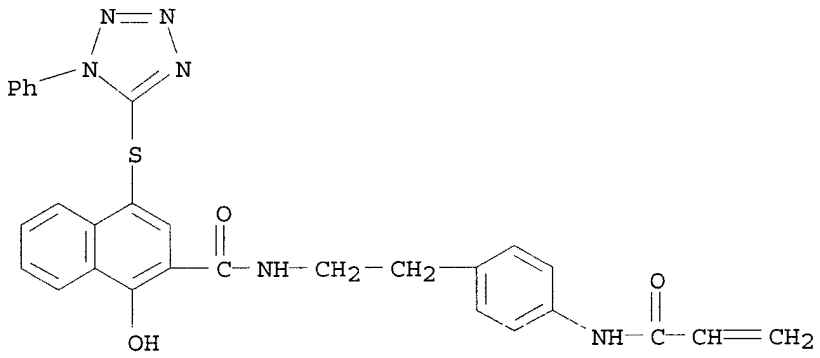
IT **101902-33-4**
RL: USES (Uses)
(cyano **photog.** coupler)

RN 101902-33-4 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 1-hydroxy-N-[2-[4-[(1-oxo-2-propenyl)amino]phenyl]ethyl]-4-[(1-phenyl-1H-tetrazol-5-yl)thio]-2-naphthalenecarboxamide (9CI) (CA INDEX NAME)

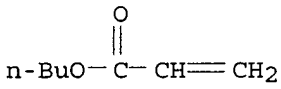
CM 1

CRN 101902-32-3
CMF C29 H24 N6 O3 S



CM 2

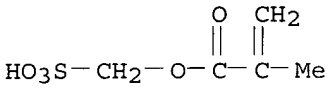
CRN 141-32-2
CMF C7 H12 O2



IT **101182-79-0 101902-30-1 101902-31-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(magenta **photog.** coupler)
RN 101182-79-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, sulfomethyl ester, sodium salt, polymer with butyl 2-propenoate and N-[1-(2,5-dichlorophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

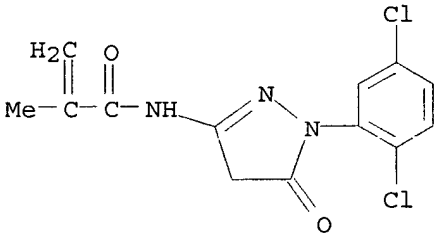
CM 1

CRN 101182-78-9
CMF C5 H8 O5 S . Na



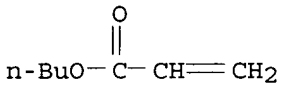
CM 2

CRN 85546-84-5
CMF C13 H11 Cl2 N3 O2



CM 3

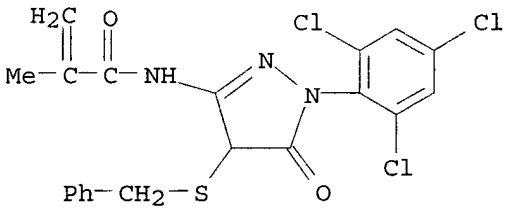
CRN 141-32-2
CMF C7 H12 O2



RN 101902-30-1 CAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with N-[4,5-dihydro-5-oxo-4-[(phenylmethyl)thio]-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]-2-methyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

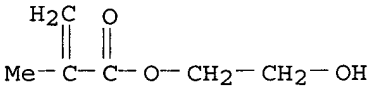
CM 1

CRN 101902-29-8
CMF C20 H16 Cl3 N3 O2 S



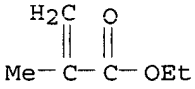
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 97-63-2
CMF C6 H10 O2



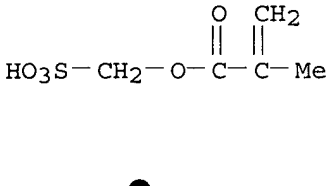
RN 101902-31-2 CAPLUS

KOROMA EIC1700

CN 2-Propenoic acid, butyl ester, polymer with N-[1-(2,3-dichlorophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-methyl-2-propenamide and sulfomethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

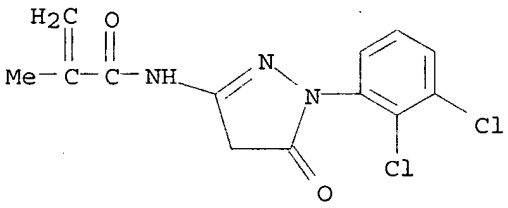
CM 1

CRN 101182-78-9
CMF C5 H8 O5 S . Na



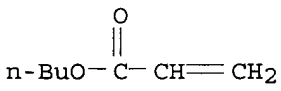
CM 2

CRN 98208-78-7
CMF C13 H11 Cl2 N3 O2



CM 3

CRN 141-32-2
CMF C7 H12 O2



IC ICM G03C007-30
ICS G03C007-32
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color **photog** material polymer coupler; **silver**

KOROMA EIC1700

halide color **photog** processing

IT **Photographic** couplers
(polymeric, **silver halide** color **photog.** materials containing)

IT **101902-33-4**
RL: USES (Uses)
(cyano **photog.** coupler)

IT **101182-79-0 101902-30-1 101902-31-2**
RL: TEM (Technical or engineered material use); USES (Uses)
(magenta **photog.** coupler)

IT 101996-40-1
RL: USES (Uses)
(yellow **photog.** coupler)

L15 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:532282 CAPLUS
DOCUMENT NUMBER: 103:132282
TITLE: **Photographic silver halide** recording material
INVENTOR(S): Himmelmann, Wolfgang; Sackmann, Guenter; Meyer, Rudolf
PATENT ASSIGNEE(S): Agfa-Gevaert A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 43 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3331542	A1	19850321	DE 1983-3331542	19830901
EP 136506	A2	19850410	EP 1984-109878	19840820
EP 136506	B1	19880803		
EP 136506	A3	19870325		
R: BE, CH, DE, FR, GB, LI				
US 4524131	A	19850618	US 1984-643159	19840822
JP 60156056	A2	19850816	JP 1984-179524	19840830
JP 05074808	B4	19931019		
CA 1217081	A1	19870127	CA 1984-462142	19840830
PRIORITY APPLN. INFO.:			DE 1983-3331542	19830901

AB **Photog.** materials having decreased adhesion of the outer layer and high smoothness and transparency after processing contain in the outer layer a combination of a hydrophilic colloid and alkali **processing solution-soluble** preformed polymer particles with a particle size ≤10 μm. Especially useful are graft copolymers of methacrylate and Me methacrylate on α-olefin- or styrene-maleic **acid** semiamide copolymers or the alkali salts of alternating copolymers from maleic anhydride and α-olefins or styrene of particle size 0.5-8 μm and a particle size distribution of ± 1 μm. Thus, an unhardened color neg. film was coated with a composition containing 15% **aq**. gelatin 400, 4% **aqueous** C8F17SO3-N+Et4 80, water 2800, and a maleic **acid** semiamide-methacrylic **acid**-Me

methacrylate-styrene copolymer (particle size distribution between .apprx.0.4 and .apprx.2.5 μm) 4 g to give a surface protective layer of 0.6-0.7 g/m2 (dry). The resultant material showed <10% of the surface adhering, 200-250 g of force to remove the film from a cartridge, 0-5% dye stains, a granularity of 1.8, and a surface smoothness before and after processing of 80 and 94%, resp., vs 80-90%, 1000-1500 g, 20-50%, 1.8, and 94 and 95%, resp., for a control containing no polymer particle.

IT **9080-79-9**
RL: USES (Uses)
(**photog.** material with surface layer containing hydrophilic colloid and alkali **solution**-soluble polymer and, with improved antiblocking properties and smoothness and transparency)

RN 9080-79-9 CAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50851-57-5
CMF (C8 H8 O3 S)x
CCI PMS

CM 2

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1— CH═ CH_2

D1— SO_3H

IC ICM G03C001-10
ICS C08L051-06; C08J003-06
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST surface adhesion **photog** film particle; smoothness surface **photog** film particle; transparency surface **photog** film particle; polymer particle surface **photog** film; gelation surface **photog** film; acetylgelatin surface **photog** film
IT **Photographic** films
Photographic paper
(with outer layer containing hydrophilic colloid and alkali **soln**

.-soluble polymer particles for decreased adhesion and improved smoothness and transparency)

IT 98152-74-0
RL: USES (Uses)
(graft, **photog.** materials with surface layer containing hydrophilic colloid and, for decreased adhesion and improved smoothness and transparency)

IT 9003-39-8 9032-43-3
RL: USES (Uses)
(**photog.** material with surface layer containing alkali **solution**-soluble polymer particles with layer of, for decreased adhesion and improved smoothness and transparency)

IT 107-35-7D, reaction products with tetrakis(vinylsulfonylmethyl)methane 1343-98-2 3825-26-1 9011-14-7 **9080-79-9** 56773-42-3 60345-53-1D, reaction products with taurine 63629-89-0 65411-60-1
RL: USES (Uses)
(**photog.** material with surface layer containing hydrophilic colloid and alkali **solution**-soluble polymer and, with improved antiblocking properties and smoothness and transparency)

L15 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:601356 CAPLUS
DOCUMENT NUMBER: 101:201356
TITLE: **Silver halide photographic** material for **photomechanical** process and method for its reduction processing
INVENTOR(S): Kasama, Yasuo; Nobuaki, Inoue; Kuwabara, Kenichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd. , Japan
SOURCE: Eur. Pat. Appl., 52 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 114699	A2	19840801	EP 1984-100728	19840124
EP 114699	A3	19870121		
R: DE, GB				
JP 59135456	A2	19840803	JP 1983-9612	19830124
JP 02035970	B4	19900814		
US 4746594	A	19880524	US 1987-21570	19870302
PRIORITY APPLN. INFO.:			JP 1983-9612	19830124
			US 1984-573176	19840123
			US 1985-800101	19851122

AB A **photog.** material for **photomech.** process comprises a support, a **photosensitive Ag** halide emulsion layer and a light-insensitive upper layer having a melting time greater than the melting time of the emulsion layer. The emulsion contains an additive selected from starch, modified starch and macromol. polysaccharide. Thus, a poly(ethylene terephthalate) support was coated with a Au-S-sensitized

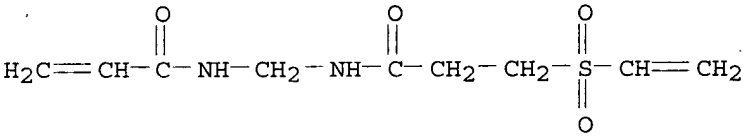
emulsion (AgCl 80, AgBr 19.5 and AgI 0.5 mol %) containing gelatin at 45 weight %
of **Ag** halide, a spectral sensitizer, a stabilizer, a polymer latex (US Patent 3,525,620), polyoxyethylene nonyl Ph ether, a hardener, hydroxypropyl starch 0.48 g/m2, overcoated with a composition containing gelatin,
the above polymer latex, a PMMA latex, a polymeric hardener (CH2CHCONHC(Me)2CH2SO3Na)x(CH2CHCONHCH2NHCOCH2CH2SO2CH=CH2)y (x/y = 3/1) at 80 mg/m2, imagewise exposed to a W lamp for 10 s, **developed** in a **solution** containing Na2CO3, HCOH-H2S adduct, KBr, hydroquinone, Na2SO3, and dipped in a reducing **solution** containing ceric **sulfate** 25, concentration H2SO4 30 g, and H2O 1 L. The material has lower swelling degree and much greater reduction width than a starch-free control.

IT **85899-49-6**
RL: USES (Uses)
(**photog.** material for **photomech.** process with emulsion layer containing starch and **photoinsensitive** layer containing)

RN 85899-49-6 CAPLUS
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-[[[3-(ethenylsulfonyl)-1-oxopropyl]amino]methyl]-2-propenamide (9CI) (CA INDEX NAME)

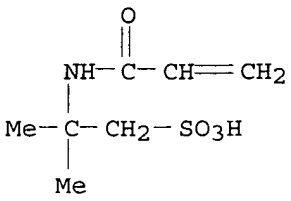
CM 1

CRN 85888-78-4
CMF C9 H14 N2 O4 S



CM 2

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



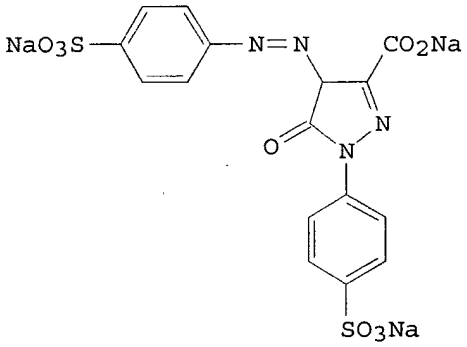
IC G03F001-00; G03C001-76
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **photomech** process **photog** film; printing plate transparency **photog** film
IT **Photographic** films
(for **photomech.** process)
IT Printing plates
(**photog.** material for fabrication of)
IT 4866-61-9 9004-53-9 9005-84-9 9016-45-9 9049-76-7 9057-02-7 66710-66-5 92991-00-9
RL: USES (Uses)
(**photog.** material for **photomech.** process with emulsion layer containing)
IT 9011-14-7 **85899-49-6**
RL: USES (Uses)
(**photog.** material for **photomech.** process with emulsion layer containing starch and **photoinsensitive** layer containing)
IT 62-56-6, uses and miscellaneous 7647-01-0, uses and miscellaneous 7664-93-9, uses and miscellaneous 13590-82-4 15708-41-5
RL: USES (Uses)
(reducing **solution** containing, in **processing** of **photog.** material for **photomech.** process)

L15 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:183326 CAPLUS
DOCUMENT NUMBER: 100:183326
TITLE: Radiographic image forming
INVENTOR(S): Sakamoto, Eiichi; Kawasaki, Mikio; Ono, Kouji; Fukuoji, Kakujulo; Fujimori, Noboru
PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd. , Japan
SOURCE: Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 101295	A2	19840222	EP 1983-304608	19830809
EP 101295	A3	19850814		
EP 101295	B1	19880629		
R: DE, FR, GB				
JP 59030535	A2	19840218	JP 1982-140743	19820812
JP 60058458	B4	19851220		
US 4500631	A	19850219	US 1983-520829	19830805

PRIORITY APPLN. INFO.: JP 1982-140743 19820812

GI



I

AB A radiog. imaging method is described providing images with improved sharpness by reducing the effect of light cross-over. The method employs (1) a **photog.** material comprising a support coated on both sides with a layer containing **photosensitive Ag** halide particles, substantially non-**photosensitive** metal salt particles with an adsorbed dissoln. retarder, phys. **development** nuclei, and H2O-**soluble** dyes or a compound comprising the dye coupled to a non-diffusive mordant and (2) a **developer solution** containing a reducing agent and a substance capable of dissolving metallic salt particles. Thus, a sublayered poly(ethylene terephthalate) support was coated on both sides with a AgCl emulsion (average particle size 0.1 μ) containing 1-phenyl-5-mercaptotetrazole 1.2 g/mol AgCl, phys. development nuclei in the form of chloroauric **acid** 120 mg/mol AgCl, dye I 4 mg/m2 to give a layer (acting as the metallic salt particle layer) with a **Ag** coating weight of 1 g/m2, overcoated with a **Ag**(Br,I) emulsion (3.5 mol.% AgI) which was S-, Au-sensitized, containing 4-hydroxy-6-methyl-1,3,3a,7-tetraazaindene 0.2 g/mol **Ag** halide to give a **Ag** coating weight of 3 g/m2, stored at 55° and 20% relative humidity for 3 days, imagewise exposed, and **developed** in a **solution** containing Phenidone 1, Na2SO3 60, hydroquinone 16, KBr 2, K2CO3 35 g, 5-methylbenzotriazole 40 mg, 25% glutaric aldehyde 5 mL, H2O to 1 L to provide an image with γ 3, fog d. 0.07, and relative sensitivity 100.

IT **89761-66-0**
RL: USES (Uses)

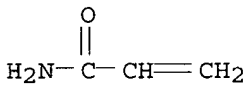
(**photog.** element containing **photosensitive** emulsion layer and non-**photosensitive** metal salt particles and layer containing non-**photosensitive** metal salt particles and, for radiog. imaging, with reduced light cross-over effect)

RN 89761-66-0 CAPLUS

CN 1H-Imidazolium, 1-ethenyl-2,3-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1
CMF C3 H5 N O

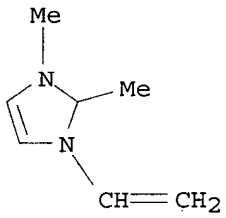


CM 2

CRN 3974-66-1
CMF C7 H11 N2 . C7 H7 O3 S

CM 3

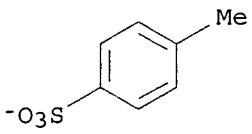
CRN 45657-58-7
CMF C7 H11 N2



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

CM 4

CRN 16722-51-3
CMF C7 H7 O3 S

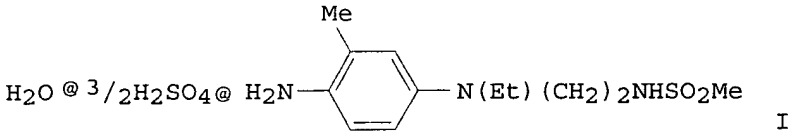


IC G03C005-16; G03C005-54
CC **74-13** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST radiog contrast image **photog** film
IT **Photographic** developers
(for radiog. films, for reduced light cross-over effect)
IT Radiography
(**photog.** element for, reduction of light cross-over effect in)
IT **Photographic** films
(radiog., reduction of light cross-over effect in)
IT 86-93-1 15182-68-0 16903-35-8 66099-77-2 75151-27-8 89761-64-8 89761-65-9 **89761-66-0** 89761-68-2
RL: USES (Uses)
(**photog.** element containing **photosensitive** emulsion layer and non-**photosensitive** metal salt particles and layer containing non-**photosensitive** metal salt particles and, for radiog. imaging, with reduced light cross-over effect)
IT 92-43-3 111-30-8 123-31-9, uses and miscellaneous 136-85-6 584-08-7 7757-83-7 7758-02-3, uses and miscellaneous
RL: USES (Uses)
(**photog. processing solution** containing, for radiog. materials)

L15 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:165375 CAPLUS
DOCUMENT NUMBER: 100:165375
TITLE: **Photosensitive silver halide photographic** material
INVENTOR(S): Iijima, Toshifumi; Koboshi, Shigeharu; Yamazaki, Hiroshi
PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd. , Japan
SOURCE: Brit. UK Pat. Appl., 16 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2113416	A1	19830803	GB 1983-1306	19830118
GB 2113416	B2	19851016		
JP 58126525	A2	19830728	JP 1982-7972	19820120
JP 03021897	B4	19910325		
US 4491627	A	19850101	US 1983-456780	19830110

DE 3301819 A1 19830908 DE 1983-3301819 19830120
PRIORITY APPLN. INFO.: JP 1982-7972 19820120
GI



I

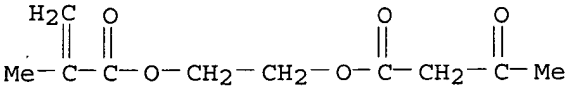
AB A **Ag** halide color **photog.** material which can be used in forming a dye image by 1-bath processing is comprised of ≥1 hydrophilic colloid layer containing a processing reagent microencapsulated with a wall material which can be dissolved at pH ≥7. The processing reagent is a reducing agent, an oxidizing agent, or a **Ag** halide solvent. The wall material of the microcapsules is prepared from a vinyl polymer having pendant carboxyl or sulfonic **acid** groups, a copolymer of methacrylic **acid**, acrylic **acid** or sulfonic **acid** with a vinyl ketone, styrene, or a methacrylate, or a condensation product of lysine with a polycarboxylic **acid** chloride. Thus, a **solution** of **developer** I 13 g in H2O 40 mL was dispersed with a **solution** of bis(2-ethylhexyl)sulfosuccinate Na salt 12 and polyoxyethylene 4-lauryl ether 6 g in hexane 80 mL, mixed with methacrylic **acid** 10 g, N,N'-mthylenebisacrylamide 100 mg Na riboflavin-5'-**phosphate** 5 and K **persulfate** 1 mg , irradiated with light until the monomers diappeared, the hexane solvent evaporated, and the microcapsules (100-300 nm sizes) isolated by centrifugation. A **photog.** film prepared with a **Ag**(Br, Cl) emulsion containing a magenta coupler [1-(2,4,6-trichlorophenyl)-3[2-chloro-5[1-(octadecyl)succinimido]anilino]-5-pyrazolone] and the I-containing microcapsules was stored for 2 days at 55°, light exposed, and processed to give a relative sensitivity of 195, a log of 0.07, and a Dmax of 2.228 vs. 70, 0.30, and 0.80, resp., for a control using non-microencapsulated I.

IT **54617-51-5**
RL: USES (Uses)
(**photog.** films containing microencapsulated **developing solns.** containing, for improved stability and color d.)

RN 54617-51-5 CAPLUS
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-(1-methylethyl)-2-propenamide and 3-sulfopropyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

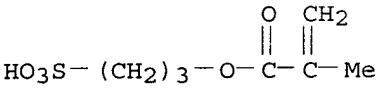
CM 1

CRN 21282-97-3
CMF C10 H14 O5



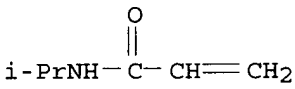
CM 2

CRN 10548-16-0
CMF C7 H12 O5 S . Na



CM 3

CRN 2210-25-5
CMF C6 H11 N O



IC G03C001-06
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST microencapsulated processing agent **photog** emulsion
IT **Photographic** processing
(color, 1-bath, of **photog.** materials containing **processing** agents in alkaline-**soluble** microcapsules)
IT **Photographic** emulsions
Photographic films
(color, containing **processing** agents in alkali-**soluble** microcapsules for improved stability and color d.)
IT **Photographic** developers
(color, **photog.** materials containing microencapsulated, for improved stability and color d.)
IT Encapsulation
(micro-, of **photog.** processing agents in **photog.** materials by alkaline-soluble polymers by light irradiation)
IT 14023-85-9

KOROMA EIC1700

RL: USES (Uses)
(microencapsulation of **photog. processing solns.** containing, in **photog.** materials for improved stability and color d.)

IT 577-11-7 5274-68-0 25646-71-3 **54617-51-5** 62149-57-9
RL: USES (Uses)
(**photog.** films containing microencapsulated **developing solns.** containing, for improved stability and color d.)

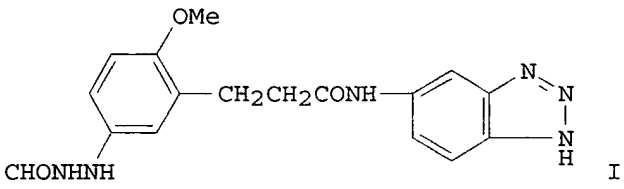
IT 22251-85-0
RL: USES (Uses)
(**photoinduced** microcapsulation of **photog.** processing agents by methacrylic **acid**-methylenebisacrylamide and, in **photog.** materials for improved stability and color d.)

IT 79-41-4, uses and miscellaneous 110-26-9
RL: USES (Uses)
(**photoinduced** microencapsulation of **photog.** processing agents by methylenebisacrylamide and, in **photog.** materials for improved stability and color d.)

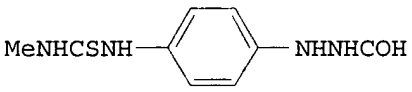
L15 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1983:461689 CAPLUS
DOCUMENT NUMBER: 99:61689
TITLE: Hydrazide compositions and **photographic** materials containing them
INVENTOR(S): Evans, Gareth Bryn; Magee, Paul Mary
PATENT ASSIGNEE(S): Kodak Ltd., UK
SOURCE: Brit. UK Pat. Appl., 15 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2107074	A1	19830420	GB 1982-25039	19820902
GB 2107074	B2	19840912		
CA 1170886	A1	19840717	CA 1982-410527	19820831
US 4416969	A	19831122	US 1982-413903	19820901

PRIORITY APPLN. INFO.: GB 1981-26621 19810902
GI



I



II

AB A **Ag** halide **photog.** element containing a nucleating agent combination comprising a N-containing heterocyclic group-substituted phenylhydrazide and a thiourea-substituted phenylhydrazide exhibits a synergistic speed increase and improved contrast. Thus, a poly(ethylene terephthalate) support was coated with a layer containing magenta RDR 0.45, gelatin 1.35 g/m2, a layer containing a green-sensitized **Ag** emulsion 0.35, gelatin 1 g/m2, 2-(2-octadecyl)-5-sulfohydroquinone K salt 1.2 g/mol, I 75, II 15 mg/mol **Ag** halide, overcoated with a layer containing didodecyl hydroquinone 0.4, gelatin 0.8 g/m2, imagewise exposed, **processed** with a **solution** containing KOH 28, 5-methylbenzotriazole 1, 11-aminoundecanoic **acid** 2, KBr 2 g, benzyl alc. 8 mL, H2O to 1 L (pH = 13.5), laminated with a receiver containing poly(styrene-N-vinylbenzyl-N-benzyl-N,N-dimethylammonium **sulfate** -divinylbenzene) mordant to give an image with a d. of 1.8.

IT **81313-45-3**
RL: USES (Uses)
(**photog.** color element containing)

RN 81313-45-3 CAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, sulfate (1:2), polymer with diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

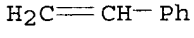
CM 1

CRN 1321-74-0
CMF C10 H10
CCI IDS

2 [D1—CH═CH2]

CM 2

CRN 100-42-5
CMF C8 H8

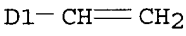


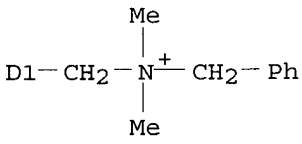
CM 3

CRN 81313-44-2
CMF C18 H22 N . 1/2 O4 S

CM 4

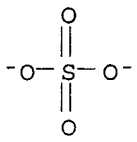
CRN 72688-67-6
CMF C18 H22 N
CCI IDS





CM 5

CRN 14808-79-8
CMF O4 S



IC G03C001-485
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST hydrazide deriv nucleating agent **photog**; phenylhydrazide deriv nucleating agent **photog**
IT Hydrazides
RL: USES (Uses)
(**photog. silver** nucleating agent combinations containing heterocyclic group- and thiourea-substituted)
IT **Photography**, color
(diffusion-transfer, **silver** nucleating agent combination for, containing heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
IT **Photographic** emulsions
(lith, reversal, direct, **silver** nucleating agent combination for, containing heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
IT **Photographic** emulsions
(reversal, direct, **silver** nucleating agent combination for, containing heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
IT 65293-89-2 66172-61-0 72688-53-0 79859-19-1 79859-20-4 **81313-45-3**
RL: USES (Uses)
(**photog.** color element containing)
IT 63401-97-8 63402-00-6 63402-01-7 69447-70-7 73583-54-7 86467-81-4
RL: USES (Uses)
(**photog.** color material containing, increased nucleation speed in)
IT 100-44-7D, reaction product with poly(vinylimidazole) 121-44-8, uses and miscellaneous 9002-89-5 25232-42-2D, reaction product with benzyl chloride 86467-82-5
RL: USES (Uses)
(**photog.** diffusion-transfer element containing)
IT 497-19-8, uses and miscellaneous 1936-57-8
RL: USES (Uses)
(**photog. processing solution** containing, for diffusion-transfer element containing nucleating agent combination consisting of heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
IT 100-51-6, uses and miscellaneous 123-31-9, uses and miscellaneous 136-85-6 1310-58-3, uses and miscellaneous 2432-99-7 7757-83-7 7758-02-3, uses and miscellaneous

RL: USES (Uses)
(**photog. processing solution** containing, for diffusion-transfer element containing nucleating agent combination consisting of heterocyclic group-substituted phenylhydrazide and thiourea-substituted phenylhydrazide)

L15 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1982:627420 CAPLUS
DOCUMENT NUMBER: 97:227420
TITLE: **Silver** complex diffusion-transfer **photographic photosensitive** material
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57019730	A2	19820202	JP 1980-90828	19800703
JP 63035012	B4	19880713		

PRIORITY APPLN. INFO.: JP 1980-90828 19800703

AB **Ag** complex diffusion-transfer **photog.** **photosensitive** materials contain water-dispersible polymer particles and ≥1 compound of the formula RZR1 (R = SH or its precursor; Z = divalent hydrocarbon moiety; R1 = solubilizing group). The addition of the polymer improves the storage stability and processibility and also prevents the lowering of the contrast by the **Ag** complexing agent. Thus, S-acetylthiosalicylic **acid** and an acrylic **acid**-Et acrylate copolymer latex were added to a **Ag** (Br,Cl) emulsion and the emulsion was coated on a polyethylene-coated paper support to give a **Ag** complex diffusion-transfer **photog.** sheet. The sheet was imagewise exposed, contacted with a receptor sheet containing PdS by using a **processing solution** to give **photog.** images having high-contrast, and a high-quality lithog. plate was prepared from the receptor sheet.

IT **83789-99-5**
RL: USES (Uses)
(**silver** complex diffusion-transfer **photog.** **photosensitive** materials containing mercapto compound type complexing agent and)

RN 83789-99-5 CAPLUS
CN 2-Propenoic acid, ethyl ester, polymer with ethenylbenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

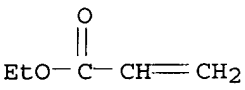
CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS

D1— CH═ CH_2

D1— SO_3H

CM 2

CRN 140-88-5
CMF C5 H8 O2



IC G03C001-06
ICA G03C005-54
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **silver** complex diffusion transfer **photog**; **photog silver** complexing agent; lithog plate **photog** prepn
IT Lithographic plates
(**silver** complex diffusion-transfer **photog.** materials for preparation of)
IT **Photographic** paper
(**silver** complex diffusion-transfer, complexing agents and polymeric additives for)
IT 25085-35-2 25119-83-9 25212-88-8 25322-25-2 53302-81-1 **83789-99-5**
RL: USES (Uses)
(**silver** complex diffusion-transfer **photog.** **photosensitive** materials containing mercapto compound type complexing agent and)
IT 70-49-5 107-03-9 147-93-3 55819-78-8
RL: USES (Uses)
(**silver** complexing agent, for **silver** complex diffusion-transfer **photog.** materials)

L15 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1981:74671 CAPLUS

KOROMA EIC1700

DOCUMENT NUMBER: 94:74671
TITLE: Graft polymers as layers for controlling diffusion in **photographic** products
INVENTOR(S): Sullivan, Charles Irving
PATENT ASSIGNEE(S): Polaroid Corp., USA
SOURCE: Ger. Offen., 54 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2910271	A1	19800925	DE 1979-2910271	19790315
DE 2910271	C2	19890105		
AU 526792	B2	19830203	AU 1979-44638	19790227
AU 7944638	A1	19800904		
FR 2451593	A1	19801010	FR 1979-6798	19790316
FR 2451593	B1	19871204		

PRIORITY APPLN. INFO.: DE 1979-2910271 19790315

AB **Photog.** diffusion-transfer film units contain: 1) a **photosensitive** element with ≥1 **photosensitive** **Ag** halide emulsion layer which contains a diffusible image-forming material which is **soluble** in the **developer**; 2) an image-receiving element; 3) a means of distributing an alkaline developer in the film unit; and 4) a layer for control of diffusion in the **photosensitive** element and/or in the image-receiving element. The layer for control of diffusion produces a polymer from a monomer which undergoes β-elimination in alkaline **solution** to give a polymer containing the repeating units [Z(CO2CRR1CHR2R3)] (Z = the addition polymerization product of an ethylenically unsatd. C2-5 aliphatic group; R, R1, R2 = H, Me, Ph but not more than 1 of R, R1, and R2 can be Me or Ph; R3 = an active group). Thus, an image-receiving element was prepared by coating on a transparent poly(ethylene terephthalate) support the following: 1) an **acidic** polymer layer (26.91 g/m2) containing the partial Bu ester of ethylene-maleic anhydride copolymer mixed with .apprx.10 weight% poly(vinyl butyral); 2) a retardation layer containing 5.38 mg/m2 of inoculation nuclei of 100 weight parts of a diacetone acrylamide-acrylic **acid**-Na 2-acrylamido-2-methylpropanesulfonate copolymer (87.5:2:0.5) around which 49 weight parts of 2-cyanoethyl acrylate are polymerized; 3) an image-receiving layer with 3.23 g/m2 of a coating from a mixture of poly(vinyl alc.) 6, poly(vinylpyridine) 3, and a graft polymer of 4-vinylpyridine-vinylbenzyltrimethylammonium chloride on hydroxyethyl cellulose 1 weight part. A developer containing H2O 100, benzotriazole 1.12, hydroxyethyl CM-cellulose 4.02, 50% KOH **solution** 4.15, and thymolphthalein 0.50 g was introduced between the polymeric test layer and the transparent element at a thickness of .apprx.0.07 mm. The penetration time, i.e. the time required for the developer to penetrate the retardation layer and react with the polymeric **acid** to lower the pH value, was determined on the basis of the color change from blue to colorless. The time at

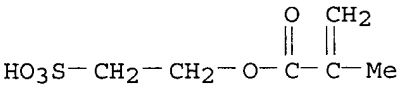
which the layer starts to change color and the time at which it is completely clear were 280 and 325 s, resp., for a coating weight of 5.38 mg/m2 vs. 180 and 210 s, resp., for a control retardation layer containing 5.38 mg/m2 of a Bu acrylate-diacetone acrylamide-styrene-methacrylic **acid** copolymer (60:30:4:6).

IT **76468-15-0 76468-16-1**
RL: USES (Uses)
(graft, retardation layer containing, for color diffusion-transfer **photog.** films)

RN 76468-15-0 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-cyanoethyl ester, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate) and 2-sulfoethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

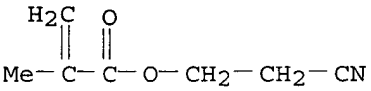
CM 1

CRN 10595-80-9
CMF C6 H10 O5 S



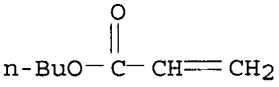
CM 2

CRN 4513-53-5
CMF C7 H9 N O2



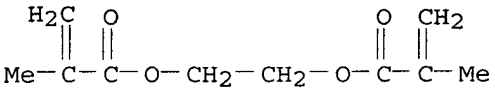
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

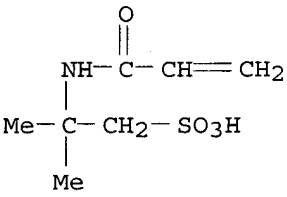
CRN 97-90-5
CMF C10 H14 O4



RN 76468-16-1 CAPLUS
CN 2-Propenoic acid, polymer with 2-cyanoethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

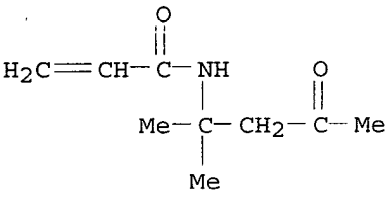
CM 1

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



CM 2

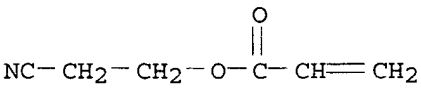
CRN 2873-97-4
CMF C9 H15 N O2



CM 3

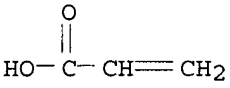
CRN 106-71-8

CMF C6 H7 N O2



CM 4

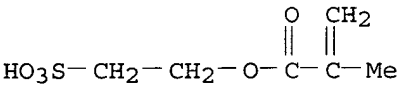
CRN 79-10-7
CMF C3 H4 O2



IT **76468-43-4 76483-76-6**
RL: USES (Uses)
(retardation layer containing, for color diffusion-transfer **photog**
. films)
RN 76468-43-4 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-cyanoethyl 2-propenoate and 2-sulfoethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

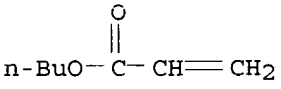
CM 1

CRN 10595-80-9
CMF C6 H10 O5 S



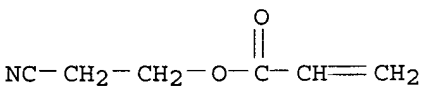
CM 2

CRN 141-32-2
CMF C7 H12 O2



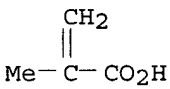
CM 3

CRN 106-71-8
CMF C6 H7 N O2



CM 4

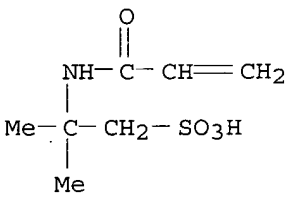
CRN 79-41-4
CMF C4 H6 O2



RN 76483-76-6 CAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-cyanoethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

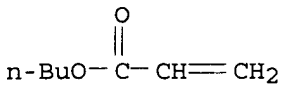
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



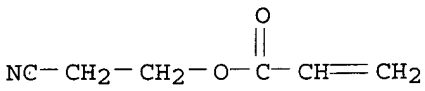
CM 2

CRN 141-32-2
CMF C7 H12 O2



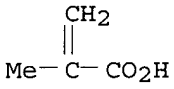
CM 3

CRN 106-71-8
CMF C6 H7 N O2



CM 4

CRN 79-41-4
CMF C4 H6 O2



IC G03C005-54
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST retardation layer **photog** graft polymer
IT Vinyl acetal polymers
RL: USES (Uses)
(butyrals, **acid** layer containing, for color diffusion-transfer **photog.** film)
IT **Photographic** films
(color, diffusion-transfer, graft polymers as retardation layers for)
IT 9006-26-2D, partial Bu ester
RL: USES (Uses)
(**acid** layer containing, for color diffusion-transfer **photog.** film)
IT 9059-98-7 76468-53-6
RL: USES (Uses)
(graft, in image-receiving layers of color diffusion-transfer **photog.** films with graft polymer retardation layers)
IT 106-71-8D, polymers **76468-15-0 76468-16-1** 76468-42-3 76468-44-5
RL: USES (Uses)
(graft, retardation layer containing, for color diffusion-transfer

photog. films)
IT 76468-17-2 **76468-43-4** 76468-45-6 76468-46-7
76483-76-6
RL: USES (Uses)
(retardation layer containing, for color diffusion-transfer **photog**. films)

L15 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1981:74670 CAPLUS
DOCUMENT NUMBER: 94:74670
TITLE: Graft polymer as a layer for controlling diffusion in **photographic** products
INVENTOR(S): Taylor, Lloyd David; Sullivan, Charles Irving; Bedell, Stanley Frank
PATENT ASSIGNEE(S): Polaroid Corp., USA
SOURCE: Ger. Offen., 54 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2910270	A1	19800925	DE 1979-2910270	19790315
DE 2910270	C2	19881103		

PRIORITY APPLN. INFO.: DE 1979-2910270 19790315

AB **Photog.** diffusion-transfer film units contain: a) a **photosensitive** element with ≥1 **photosensitive** **Ag** halide emulsion layer containing an image-forming material which is **soluble** and diffusible in the **developer**; b) an image-receiving element; c) a means of distributing an alkaline developer in the film unit; and d) a layer for diffusion control in the **photosensitive** element and/or the image-receiving element. The diffusion-control or retardation layer contains a graft polymer with an organic polymer framework on which are grafted repeating units of a hydrophobic monomer and repeating units of a monomer which undergoes β-elimination in alkaline **solution** and has the formula RCO2CR1R2CHR3R4 [R = ethylenically unsatd. C2-5 aliphatic group; R1, R2, R3 = H, Me, or Ph; and not more than 1 of R1 ,R2, and R3 are Me or Ph; R4 is an active group, SO2R5 (R5 = MeC6H4, Me, OEt, Ph, NMe2, NEt2, N(CH2Ph)2), R6CO (R6 = OEt, Me, H, NH2, NMe2, NEt2), R7SO (R7 = Ph, Me, Et), CN, or NO2]. The organic framework polymers are cellulose polymers, vinyl polymers, or gelatin. Thus, a test film was prepared by coating a 4-mil poly(ethylene terephthalate) support with a 1-mil layer of an **acid** polymer which contains 80 weight parts of a vinyl Me ether-maleic anhydride copolymer and 20 weight parts of poly(vinyl alc.) and then with a retardation layer. The retardation layer is composed of a graft copolymer of diacetone acrylamide 180, 2-cyanoethyl acrylate 12, 2-acrylamido-2-methylpropanesulfonic **acid** 1, and Et acrylate 12 weight parts on 22 weight parts of poly(vinyl alc.). The test film was placed on a transparent polyester film support and a **developer** **solution** containing

hydroxyethyl CM-cellulose 4, 50% KOH 20.8, benzotriazole 1.1, thymolphthalein 0.5 g, and H2O 100 mL, was introduced between the support and test films using slit openings of 0.09, 0.07, and 0.05 mm. The penetration time after which the color of the film changed from blue to colorless (a measure of the time necessary for the developer to penetrate the retardation layer and react with the **acid** polymer layer to lower the pH) was measured. The values are given for the time of beginning of color change (T1) and the time at which the film was completely clear (T2). The results for T1 and T2 at the 3 decreasing slit openings are 585 and 665, 585 and 684, and 610 and 697 s, resp., vs. 180 and 265, 144 and 224, and 103 and 203 s, resp., for a film with a retardation layer containing 100 weight parts of a 60/4/30/6 copolymer of Bu acrylate-styrene-diacetone acrylamide-methacrylic **acid** and 7 weight parts poly(vinyl alc.).

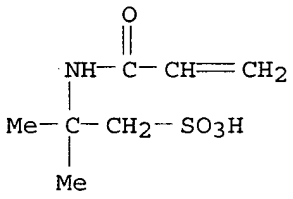
IT **75117-32-7 75117-33-8 75117-34-9 75117-35-0**
RL: USES (Uses)
(graft, **photog.** retardation layers from)

RN 75117-32-7 CAPLUS

CN 2-Propenoic acid, 2-cyanoethyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenol, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

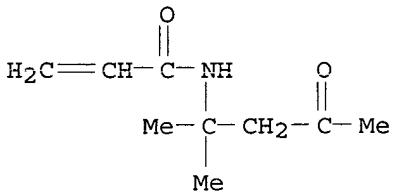
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



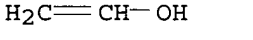
CM 2

CRN 2873-97-4
CMF C9 H15 N O2



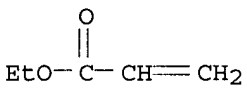
CM 3

CRN 557-75-5
CMF C2 H4 O



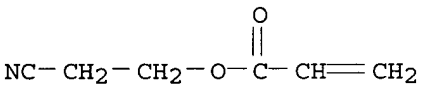
CM 4

CRN 140-88-5
CMF C5 H8 O2



CM 5

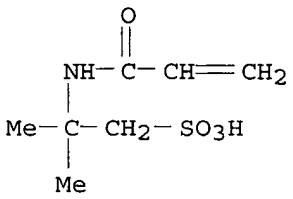
CRN 106-71-8
CMF C6 H7 N O2



RN 75117-33-8 CAPLUS
CN 2-Propenoic acid, 2-cyanoethyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenol, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

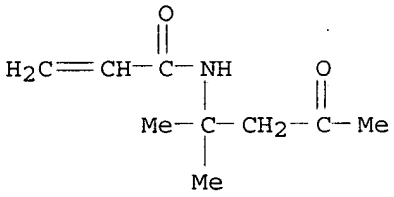
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



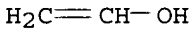
CM 2

CRN 2873-97-4
CMF C9 H15 N O2



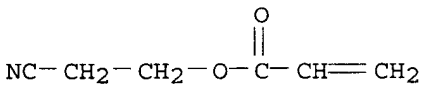
CM 3

CRN 557-75-5
CMF C2 H4 O



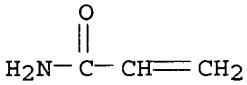
CM 4

CRN 106-71-8
CMF C6 H7 N O2



CM 5

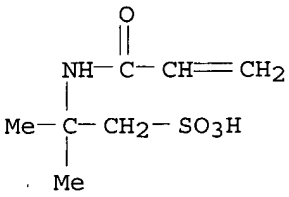
CRN 79-06-1
CMF C3 H5 N O



RN 75117-34-9 CAPLUS
CN 2-Propenoic acid, 2-cyanoethyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenol and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

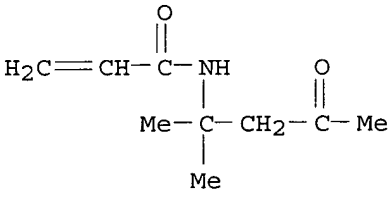
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



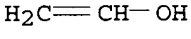
CM 2

CRN 2873-97-4
CMF C9 H15 N O2



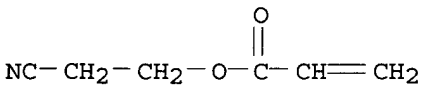
CM 3

CRN 557-75-5
CMF C2 H4 O



CM 4

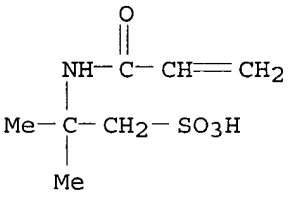
CRN 106-71-8
CMF C6 H7 N O2



RN 75117-35-0 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with 2-cyanoethyl 2-propenoate, ethenol and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

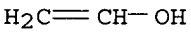
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



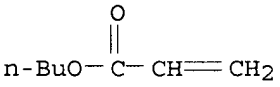
CM 2

CRN 557-75-5
CMF C2 H4 O



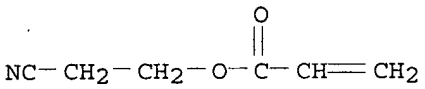
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 106-71-8
CMF C6 H7 N O2



IC G03C005-54
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST retardation layer **photog** graft polymer
IT **Photographic** films
(diffusion-transfer, graft polymers as retardation layers in)
IT 79-10-7D, alkyl esters, polymers 79-41-4D, alkyl esters, polymers 106-71-8D, polymers 2873-97-4D, polymers 4513-53-5D, polymers 9004-34-6D, polymers **75117-32-7 75117-33-8** **75117-34-9 75117-35-0** 75117-36-1 75248-86-1 76402-21-6D, polymers 76429-27-1
RL: USES (Uses)
(graft, **photog.** retardation layers from)

L15 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1980:155821 CAPLUS
DOCUMENT NUMBER: 92:155821
TITLE: Amide compounds and polymers thereof useful in **photographic** materials
AUTHOR(S): Ponticello, I. A.; Hollister, K. R.; Tuites, R. C.
CORPORATE SOURCE: UK
SOURCE: Research Disclosure (1979), 187, 657-9
CODEN: RSDSBB; ISSN: 0374-4353
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Amide compound polymers which can be used in **photog.** materials as polymeric color couplers, binders, or extenders for binders are prepared from monomers having the formula CH2:CRCOZCOCH2R1 [R = H, Me; R1 = CN, COR2(R2 = alkyl), Z = Z1Z2Z1 (Z1 = O or NR4 where R4 = H or alkyl; Z2 = a divalent hydrocarbon) or a 5-7 membered ring containing ZN atoms and bonded through these atoms], CH2:CRCONR4Z2O2CCH2R1 (R,R1,R4, and Z2 are the same as above), and addnl. monomers selected from acrylamides, sulfoesters, sulfonamides, and amides of ethylenically unsatd. carboxylic **acids** . These compds. are water-dispersible and crosslinkable. Thus, a dope prepared from a polymer prepared from 2-acrylamido-2-methylpropane-1-sulfonic **acid** Na salt and 4'-chloro-3'-[α-(4-methoxycarbonylphenoxy)-α-pivaloylacetamido]acrylamide (coupler monomer) was coated as a yellow dye-forming coupler (4.05 g/m2) in a **Ag** halide **photog.** element comprising a cellulose acetate film support having coated on 1 surface thereof a gelatin-**Ag**(Br,I) emulsion layer and a protective overcoat layer comprising gelatin and

bis(vinylsulfonylmethyl) ether hardener. The resulting element was evaluated and the polymeric coupler was observed to be effectively crosslinked and did not diffuse out of the element into the **processing solution** Color development of the element gave a Dmax of 2.50 (0 min soak) and Dmax of 2.46 (20 min soak).

IT **72689-30-6**

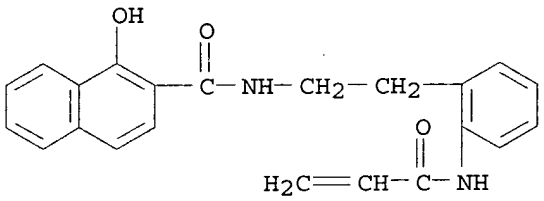
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** cyan coupler)

RN 72689-30-6 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(1-oxo-2-propenyl)amino]ethyl ester, polymer with 1-hydroxy-N-[2-[2-[(1-oxo-2-propenyl)amino]phenyl]ethyl]-2-naphthalenecarboxamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

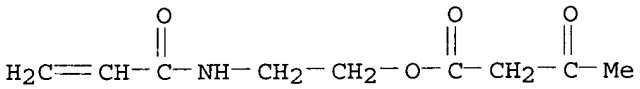
CM 1

CRN 72689-29-3
CMF C22 H20 N2 O3



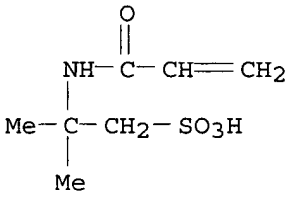
CM 2

CRN 71938-41-5
CMF C9 H13 N O4



CM 3

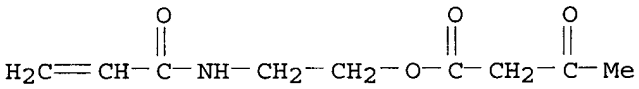
CRN 5165-97-9
CMF C7 H13 N O4 S . Na



IT **72689-31-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** yellow coupler)
RN 72689-31-7 CAPLUS
CN Benzoic acid, 4-[1-[[[2-chloro-5-[(1-oxo-2-propenyl)amino]phenyl]amino]carbonyl]-3,3-dimethyl-2-oxobutoxy]-, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and 2-[(1-oxo-2-propenyl)amino]ethyl 3-oxobutanoate (9CI) (CA INDEX NAME)

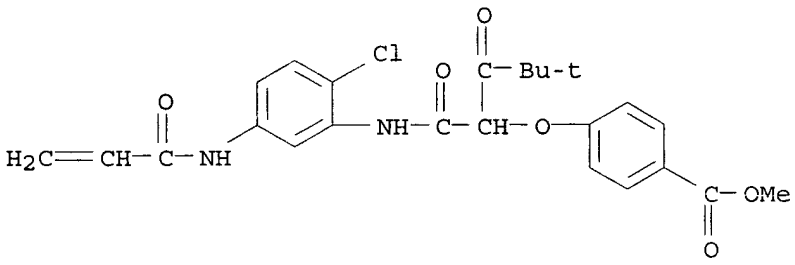
CM 1

CRN 71938-41-5
CMF C9 H13 N O4



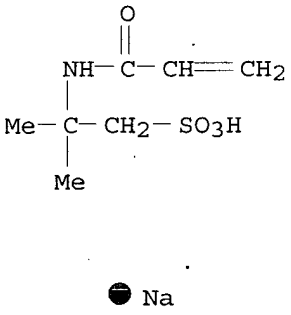
CM 2

CRN 68805-73-2
CMF C24 H25 Cl N2 O6



CM 3

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST amide compd polymer **photog**; coupler **photog** amide compd polymer; binder **photog** amide compd polymer
IT Binding materials
(amide compound polymers as, for **photog.** materials)
IT Amides, polymers
RL: USES (Uses)
(as binders for polymeric couplers in **photog.**)
IT **Photographic** couplers
(coupler group-containing amide compound polymers as)
IT **Photographic** emulsions
(gelatin substitutes for, amide compound polymers as)
IT 72689-27-1
RL: USES (Uses)
(binder, for use in **photog.** materials)
IT **72689-30-6**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** cyan coupler)
IT **72689-31-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** yellow coupler)
IT 72689-28-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L15 ANSWER 53 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1978:451362 CAPLUS
DOCUMENT NUMBER: 89:51362
TITLE: **Photographic** elements having hydrophilic colloid layers containing compounds having activator precursors and hydrophobic developing agents uniformly loaded in latex polymer particles

AUTHOR(S): Chen, T. J.; McLaen, D. F.
CORPORATE SOURCE: UK
SOURCE: Research Disclosure (1978), 169, 24-7
CODEN: RSDSBB; ISSN: 0374-4353
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Heat-developable **Ag** halide **photog.** materials are comprised of a support coated with a hydrophilic colloid layer containing **Ag** halides, an activator precursor of a compound of a protonated basic N-containing moiety and an **acid** anion, and a hydrophobic developing agent loaded in latex polymer particles. During thermal processing, the activator precursor releases a base to facilitate **photog.** development in conjunction with the encapsulated developing agent. Thus, to an **aqueous solution** of latex L-1 (16.8% solids content) was added a 10% **aqueous solution** of nonylphenoxypolyglycidol (I) 2 mL. The resulting latex composition was added to a **solution** of H-1 **developer** 3 g and MeOH 20 mL. The dispersion 1.5 mL was mixed with 2-amino-2-thiazolinium trichloroacetate 0.6 g, a 10% **aqueous solution** of I 0.3, MeOH 2.45, a gelatin-**Ag** halide emulsion (average **Ag** halide grain size 0.09 μ and 70 mg **Ag**/0.75 mL) 0.75 mL, coated on a paper support at 7.5 mg **Ag**/dm2, exposed through a step tablet, and thermally processed at 130-200° for 10 s. The **photog.** paper exhibited satisfactory **photog.** properties, and no stain was observed after the completion of the processing.

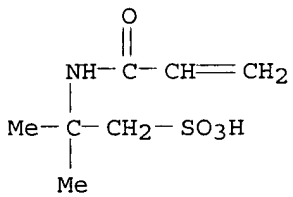
IT **67030-33-5**
RL: USES (Uses)
(microencapsulation by, of hydrophobic developing agents in heat-developable **silver halide**-gelatin **photog.** emulsions)

RN 67030-33-5 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with butyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

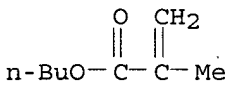
CM 1

CRN 15214-89-8
CMF C7 H13 N O4 S



CM 2

CRN 97-88-1
CMF C8 H14 O2

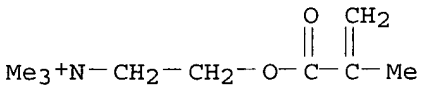


CM 3

CRN 6891-44-7
CMF C9 H18 N O2 . C H3 O4 S

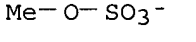
CM 4

CRN 33611-56-2
CMF C9 H18 N O2



CM 5

CRN 21228-90-0
CMF C H3 O4 S



CC **74-3** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST **photothermog** emulsion incorporation hydrophobic developer
IT **Photothermography**
(**photosensitive silver halide**-gelatin emulsions containing activator precursor and encapsulated hydrophobic developing agent for)
IT **Photographic** emulsions
(heat-developable, containing activator precursor and encapsulated hydrophobic developing agent)
IT **67030-33-5**
RL: USES (Uses)
(microencapsulation by, of hydrophobic developing agents in heat-developable **silver halide**-gelatin **photog.** emulsions)
IT 63173-68-2

KOROMA EIC1700

RL: USES (Uses)
(**photog.** activator precursor, for **silver halide**-gelatin emulsions containing encapsulated hydrophobic developing agent for **photothermog.**)

IT 66988-18-9
RL: USES (Uses)
(surfactant, for **silver halide**-gelatin emulsions containing microencapsulated hydrophobic developing agent for **photothermog.**)

L15 ANSWER 54 OF 61 CAPLUS
ACCESSION NUMBER: 1977:163598 CAPLUS
DOCUMENT NUMBER: 86:163598
TITLE: Pyrazoloneazo dye-releasing coupler for diffusion-transfer **photographic** materials
INVENTOR(S): Fujita, Shinsaku; Harada, Tohru; Sakanoue, Seiki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 51133021	A2	19761118	JP 1975-57040	19750514
JP 57012982	B4	19820313		

PRIORITY APPLN. INFO.: JP 1975-57040 19750514
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Diffusion-transfer **photog.** materials contain, in ≤1 of their **Ag** halide emulsion layers, a diffusable pyrazolonylazo dye-releasing coupler in which the pyrazolonylazo dye group is bonded via an O-containing group to the coupler part. The coupler does not release N during development, and gives a high-quality yellow dye. Thus, 1-phenyl-3-(N-hexylcarbamoyl-4-(p-sulfamoylphenylazo)-5-pyrazolone 5 g was treated with chlorosulfonic **acid** 25 mL at 10°. The resulting 1-(p-chlorosulfonylphenyl)-3-(N-hexylcarbamoyl)-4-(p-sulfamoylphenylazo)-5-pyrazolone 4.1 and 1-hydroxy-4-[4'-(4''-aminophenyl)-1',4'-dioxabutyl]-N-dodecylamino-2-naphthamide 4g were dispersed in THF 88 mL, pyridine 5.6 mL added, the mixture stirred for 4.5 h, and the reaction products were added to 1% HCl 500 mL to precipitate the coupler I (m.p. 196-8°). Then, I was added to a high-sensitivity neg. type red-sensitive **Ag**(Br,I) (7 mol% I) emulsion sensitized with 3,3',9-triethyl-5,5'-dichlorothiacarbocyanine iodine, coated on a gelatin-coated cellulose triacetate support so that the amts. of I,

Ag halide, and gelatin in the red-sensitive emulsion layer were 1.5 + 10-5, 7.5 + 10-5 mol, and 20 mg/100 cm2, resp., overcoated with gelatin 6.5 mg/100 cm2, exposed through an optical wedge and a red filter to a 2854 K W-lamp, placed on a receptor sheet prepared by coating baryta paper with a **solution** containing a polymer having the structure II (mol. weight 30,000-40,000) 35 and gelatin 7%, and **processed** with a **solution** containing ascorbic **acid** 0.2, 3-methyl-N-ethyl-N-(β-hydroxyethyl)-p-phenylenediamine H2SO4 salt 35, KBr 1.4, 6-nitrobenzimidazole HNO3 salt 0.2, hydroxyethyl cellulose 30, and NaOH 20 g/L to give an image having a maximum and min. d. of 2.0 and 0.10, resp., vs. 1.9 and 0.10, resp., for a control containing III instead of I.

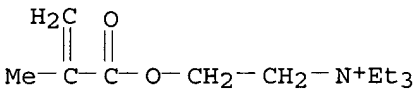
IT **62548-90-7**
RL: USES (Uses)
(**photog.** diffusion-transfer film image receptor layer containing)

RN 62548-90-7 CAPLUS

CN Ethanaminium, N,N,N-triethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethanesulfonate, homopolymer (9CI) (CA INDEX NAME)

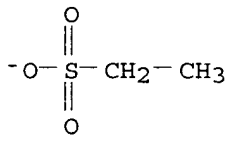
CM 1

CRN 48067-10-3
CMF C12 H24 N O2



CM 2

CRN 10047-83-3
CMF C2 H5 O3 S



IC G03C007-00

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST pyrazolone yellow coupler color **photog**

IT **Photographic** couplers
(yellow, pyrazolone derivs. as, for producing pyrazolonylazo dye images)

IT **62548-90-7**

KOROMA EIC1700

RL: USES (Uses)
(**photog.** diffusion-transfer film image receptor layer containing)
IT 62555-57-1 62555-58-2 62555-59-3 62555-60-6 62555-61-7
62789-64-4
RL: TEM (Technical or engineered material use); USES (Uses)
(**photog.** yellow coupler, for producing pyrazolonylazo dye images)
IT 61387-49-3P 62555-62-8P 62555-63-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L15 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1975:450697 CAPLUS
DOCUMENT NUMBER: 83:50697
TITLE: Synthetic **silver halide** emulsion binder
INVENTOR(S): Fitzgerald, Maurice J.
PATENT ASSIGNEE(S): Polaroid Corp., USA
SOURCE: U. S. Publ. Pat. Appl. B, 11 pp. Avail. US Pat. Trademark Off.
CODEN: USXXDP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 320452	A1	19750128	US 1973-320452	19730102
US 3925083	A	19751209		

PRIORITY APPLN. INFO.: US 1973-320452 19730102

AB The gelatin in **photographic silver halide** emulsions can be partially or totally replaced by a water-soluble film-forming polymeric salt having structure repeating units [R'CHCR2CO2ZN+R3R4R5].hivin.x (R1 R1 = H, Me, Et, or halogen; R2 = H, halogen, cyano, or lower alkyl group; R3, R4, R5 = lower alkyl or cycloalkyl group or when taken together represent the atoms necessary to complete a 3-8 numbered hetercyclic ring; Z = C1-4 alkylene or C3-6 cycloalkylene group; and X = halide, **sulfate**, alkylsulfonate, arylsulfonate, nitrate). Thus, a **photographic Ag** (Br,I) emulsion was prepared using (4.15g/55g AgNO3) acrylamide-β-(methacryloxy)ethyltrimethylammonium methyl **sulfate** polymer as the hydrophilic colloid in the precipitation and ripening stages. Poly(vinyl alc.) and surfactant Aerosol OT were added to this emulsion and it was coated on a gelatin-subbed cellulose triacetate support, air-dried, exposed on a sensitometer, and **processed** with a **processing solution** in contact with an image-receiving sheet for 10 sec. Upon separation of the sheet, a pos. image was obtained on the image-receiving sheet having a Dmax of 1.32 and Dmim of 0.12.
IT **26006-22-4 27103-90-8 42033-41-0**
55216-72-3 55216-74-5
RL: USES (Uses)

(as **photographic** emulsion gelatin substitute)

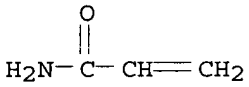
RN 26006-22-4 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1

CMF C3 H5 N O



CM 2

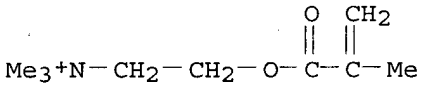
CRN 6891-44-7

CMF C9 H18 N O2 . C H3 O4 S

CM 3

CRN 33611-56-2

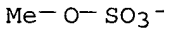
CMF C9 H18 N O2



CM 4

CRN 21228-90-0

CMF C H3 O4 S



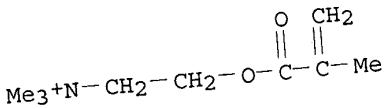
RN 27103-90-8 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, homopolymer (9CI) (CA INDEX NAME)

CM 1

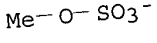
CRN 33611-56-2

CMF C9 H18 N O2



CM 2

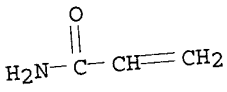
CRN 21228-90-0
CMF C H3 O4 S



RN 42033-41-0 CAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1
CMF C3 H5 N O

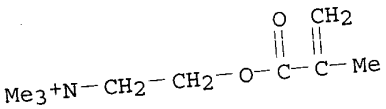


CM 2

CRN 40820-77-7
CMF C9 H18 N O2 . C7 H7 O3 S

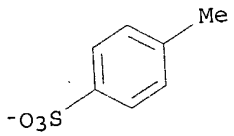
CM 3

CRN 33611-56-2
CMF C9 H18 N O2



CM 4

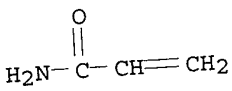
CRN 16722-51-3
CMF C7 H7 O3 S



RN 55216-72-3 CAPLUS
CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethyl sulfate, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1
CMF C3 H5 N O

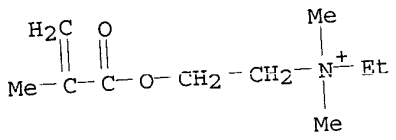


CM 2

CRN 13223-03-5
CMF C10 H20 N O2 . C2 H5 O4 S

CM 3

CRN 48063-69-0
CMF C10 H20 N O2



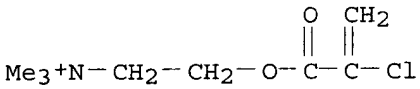
CM 4

CRN 48028-76-8
CMF C2 H5 O4 S

RN 55216-74-5 CAPLUS
CN Ethanaminium, 2-[(2-chloro-1-oxo-2-propenyl)oxy]-N,N,N-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1), homopolymer (9CI) (CA INDEX NAME)

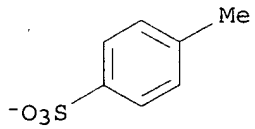
CM 1

CRN 55216-73-4
CMF C8 H15 Cl N O2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



IC G03C
NCL 096114000
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST gelatin substitute **photographic** emulsion; acrylamide polymer gelatin substitute; ammonium alkyl acrylate polymer **photog**
IT **Photographic** emulsions
(gelatin substitutes for, acrylamide-quaternary ammonium alkyl acrylate salt copolymers as)
IT 25609-94-3 **26006-22-4** 27015-43-6 **27103-90-8**
28474-62-6 **42033-41-0 55216-72-3 55216-74-5**
RL: USES (Uses)
(as **photographic** emulsion gelatin substitute)
IT 577-11-7
RL: USES (Uses)
(**photographic** gelatin-free emulsion cocntg. poly(vinyl alc., quaternary ammonium salt polymer binder, and)
IT 9002-89-5
RL: USES (Uses)

(**photographic** gelatin-free emulsion containing quaternary ammonium salt polymer binders and)

L15 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1974:497751 CAPLUS
DOCUMENT NUMBER: 81:97751
TITLE: Polymers containing resorcinol groups for use in **photographic** elements
INVENTOR(S): Scullard, Peter W.
PATENT ASSIGNEE(S): Eastman Kodak Co.
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3772014	A	19731113	US 1971-181261	19710916

PRIORITY APPLN. INFO.: US 1971-181261 19710916

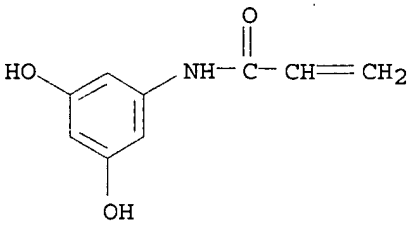
AB The copolymers containing resorcinol groups are used for removing the oxidized developers in color **photog.** processing and thus improve the image quality. Thus, a film support coated with a multilayer **Ag** halide emulsion containing 5-acrylamidoresorcinol-Na methacryloyloxyethyl **sulfate** copolymer 70 mg/ft2 was exposed and processed for 5 sec in a **developing solution** consisting of 4-amino-3-methoxy-N-ethyl-N-(β-hydroxyethyl)aniline 5.1, piperidinohexose reductone 0.8, hypo 5.0 g, NaOH 11.8 mg, and H2O to 11. An image receptor sheet containing gelatin, a cyan coupler, tricresyl **phosphate**, and Pd nuclei was presoaked in the above **developing solution** for 25 sec, and brought into contact with the above exposed **Ag** halide film for 3 min to give a dye image on the receptor sheet with only 2.2 mg **Ag**/ft2 as compared to 13.1 mg **Ag**/ft2 for a control containing 2,5-dipropylphenol at 60 mg/ft2. The low amount of **Ag** in the receptor sheet is indicative of the effectiveness of the resorcinol-containing polymer for scavenging the oxidized developers.

IT **53687-30-2**
RL: USES (Uses)
(oxidized **photog.** developers removed by, in color **photog.** processing)

RN 53687-30-2 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(sulfooxy)ethyl ester, sodium salt, polymer with N-(3,5-dihydroxyphenyl)-2-propenamide (9CI) (CA INDEX NAME)

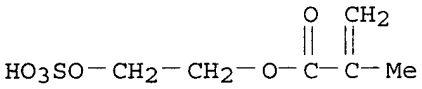
CM 1

CRN 53687-29-9
CMF C9 H9 N O3



CM 2

CRN 45103-52-4
CMF C6 H10 O6 S . Na



● Na

IC G03C
NCL 096029000D
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST resorcinol scavenger **photog** developer
IT **Photographic** processing
(color, resorcinol copolymers as scavengers for oxidized developers in)
IT **53687-30-2** 53687-31-3
RL: USES (Uses)
(oxidized **photog.** developers removed by, in color **photog.** processing)
IT 20734-67-2P 53687-29-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L15 ANSWER 57 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1974:471126 CAPLUS
DOCUMENT NUMBER: 81:71126
TITLE: Imaging systems containing optically active polysulfoxide groups
INVENTOR(S): Haas, Howard C.
PATENT ASSIGNEE(S): Polaroid Corp.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3816127	A	19740611	US 1972-270973	19720712

PRIORITY APPLN. INFO.: US 1972-270973 19720712

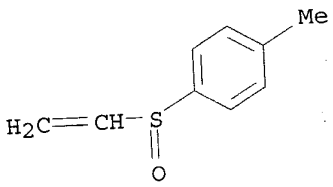
AB An imaging system is described in which imaging is accomplished by contacting an exposed **Ag** halide emulsion with a layer composed of an optically active polymeric sulfoxide and subsequently with a developer that imagewise destroys the optical rotation of the sulfoxide group to form an image viewable using crossed polarizers. Thus, a polymeric support coated with a layer of poly(p-tolylvinyl sulfoxide) [mol. weight 2400 and optical rotation [α]23D = +194° (in Me2CO)] was contacted with an imagewise exposed **Ag** halide emulsion followed by **development** with an **aqueous acid solution** of TiCl3. Upon separation of the sulfoxide layer and viewing between crossed polarizers an image was produced by selective destruction of centers of optical activity in areas corresponding to the unexposed areas of the **Ag** halide emulsion layer.

IT **31547-88-3**
RL: PROC (Process)
(**photography** of, by imagewise destruction of optical rotation of sulfoxide groups)

RN 31547-88-3 CAPLUS
CN Benzene, 1-(ethenylsulfinyl)-4-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 36832-47-0
CMF C9 H10 O S



IC G03C
NCL 096029000R
CC **74-8** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST optical rotation sulfoxide imaging; tolylvinyl sulfoxide polymer imaging
IT **Photography**
(by imagewise destruction of sulfoxide group optical rotation in polymeric sulfoxides)
IT Sulfoxides
RL: USES (Uses)
(polymers, **photography** on, by imagewise destruction of

optical rotation of sulfoxide groups)
IT **31547-88-3**
RL: PROC (Process)
(**photography** of, by imagewise destruction of optical rotation of sulfoxide groups)

L15 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1974:471054 CAPLUS
DOCUMENT NUMBER: 81:71054
TITLE: **Photographic** materials containing mordants
INVENTOR(S): Miyazako, Takushi; Tajima, Tatsuya; Kato, Hirotetu; Kokubu, Tadayoshi; Nishina, Tsutomu; Tsuji, Nobuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd.
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

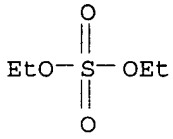
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3795519	A	19740305	US 1972-274373	19720724
PRIORITY APPLN. INFO.:			JP 1971-57276	19710730

GI For diagram(s), see printed CA Issue.
AB Mordant compds. (for **acid** dyes in **photog.** materials), which have their mordanting action markedly reduced by alkaline **processing solns.** thereby decreasing unwanted **acid** dye holdup and sorption of **thiosulfate** ions and resulting in sharper images, are addition polymers of a bisacrylamide compound and a C1-4 alkyl-substituted piperazine or dialkylethylenediamine compound Thus, an **aqueous solution** of pH 6.5 containing a 5% **aqueous solution** of methylenebisacrylamide-2,5-dimethylpiperazine polymer (I) 10 ml, 2% **aqueous solution** of dye II 10 ml, gelatin 5 g, saponin 0.1 g, mucochloric **acid** 0.1 g, and H2O 100 ml was coated on a cellulose triacetate support, overcoated successively with a fine-grain **Ag** (Br, Cl) emulsion and protective layer, and sensitometrically processed to give a much sharper image than that obtained with a control film without the I-II layer, and only caused a 20% reduction in sensitivity (based on above control) vs. 50% for a I-free II layer.
IT **53335-24-3**
RL: USES (Uses)
(**photog.** mordant, for **acid** dyes, alkaline **processing solution** deactivatable)
RN 53335-24-3 CAPLUS
CN Sulfuric acid, diethyl ester, compd. with N'-methylenebis[2-propenamide] polymer with piperazine (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5

CMF C4 H10 O4 S

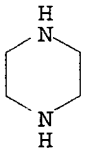


CM 2

CRN 29192-86-7
CMF (C7 H10 N2 O2 . C4 H10 N2)x
CCI PMS

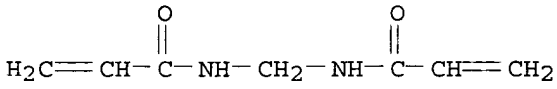
CM 3

CRN 110-85-0
CMF C4 H10 N2



CM 4

CRN 110-26-9
CMF C7 H10 N2 O2



IC G03C
NCL 096084000A
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST mordant bisacrylamide polymer **photog**
IT **Photographic** emulsions
(mordants of bisacrylamides-piperazines or -dialkylethylenediamines addition polymers for, alkaline **processing solution** deactivatable)
IT 1301-23-1 27268-31-1 27268-33-3 27268-34-4 27280-01-9 28766-99-6

KOROMA EIC1700

34175-08-1 53100-87-1 53289-13-7
RL: USES (Uses)
(**photog.** addition polymer mordants for)
IT 29192-86-7 53161-79-8 53161-84-5 53161-85-6 **53335-24-3**
RL: USES (Uses)
(**photog.** mordant, for **acid** dyes, alkaline **processing solution** deactivatable)

L15 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1973:36250 CAPLUS
DOCUMENT NUMBER: 78:36250
TITLE: **Photographic** film unit for color **photographs**
INVENTOR(S): Abbott, Thomas Irving
PATENT ASSIGNEE(S): Eastman Kodak Co.
SOURCE: Ger. Offen., 48 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2163261	A	19720629	DE 1971-2163261	19711220
US 3698896	A	19721017	US 1970-100486	19701221
CA 947134	A1	19740514	CA 1971-126964	19711105
NL 7117615	A	19720623	NL 1971-17615	19711221
FR 2119521	A5	19720804	FR 1971-45834	19711221
IT 944155	A	19730420	IT 1971-32682	19711221

PRIORITY APPLN. INFO.: US 1970-100486 19701221

AB In films of the type of U.S. 3,227,550 (CA 64: 16035a) the light-sensitive section carries 3 **Ag** halide emulsion (0.6-6 μ) and 3 associated layers (1-7 μ) containing color formers rendered nondiffusing by C8+ ballast groups attached in their coupling position through an O, N:N, S,S2, alkylidene, or Hg linkage. Reaction with oxidized developer generates diffusible dyes by splitting off the ballast groups. Between the emulsion-color former layer pairs there are gelatin interlayers (1-5 μ) containing couplers reacting with diffusing oxidized developer to form immobile products and thus avoiding undesirable color formation. The developer, having a viscosity of 100-200,000 cP., has a pH >12 and may contain the developing agent if it is not present as a Schiff base (e.g. the reaction product of N,N-diethyl-3-methyl-4-aminoaniline with o-sulfobenzaldehyde) in the negative section. It is spread from a pressure-rupturable container between the negative and the receptor material. The latter (U.S. 3,445,228; Fr. 1,526,652; CA 71: 55534g) carries on its support an 8-50 μ layer of an **acid** polymer to lower the pH of the exhausted **developer solution** to 5-8 and thus stabilize the dye image in the top coating which contains polymeric dye mordants with quaternary N' groups, such as a copolymer from benzyldimethyl-(3-maleimidopropyl)-ammonium chloride and styrene. A hydrophilic top coating of 30-60 mg gelatin or casein per 0.09 m2 on the

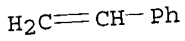
receptor section increases the Dmax. values of the transferred dye images and decreases their Dmin.. It may also contain an uv absorber.

IT **31628-57-6**
RL: USES (Uses)
(**photographic** color diffusion-transfer emulsion image receiving layers containing)

RN 31628-57-6 CAPLUS
CN 1H-Pyrrole-1-propanaminium, 2,5-dihydro-N,N,N-trimethyl-2,5-dioxo-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5
CMF C8 H8

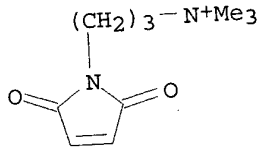


CM 2

CRN 29213-62-5
CMF C10 H17 N2 O2 . C7 H7 O3 S

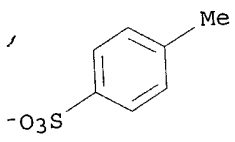
CM 3

CRN 46277-50-3
CMF C10 H17 N2 O2



CM 4

CRN 16722-51-3
CMF C7 H7 O3 S



IC G03C
CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST dye diffusion color **photog**
IT **Photographic** emulsions
(color, diffusion-transfer, containing nondiffusing color formers)
IT **31628-57-6** 40399-52-8
RL: USES (Uses)
(**photographic** color diffusion-transfer emulsion image receiving layers containing)

L15 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1972:29523 CAPLUS
DOCUMENT NUMBER: 76:29523
TITLE: Mordant compositions for use in **photographic** elements
INVENTOR(S): Kalenda, Norman W.
PATENT ASSIGNEE(S): Eastman Kodak Co.
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

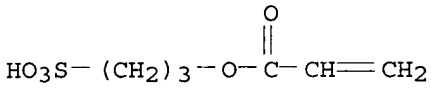
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3615545	A	19711026	US 1967-666473	19670908
BE 720436	A	19690217	BE 1968-720436	19680905
GB 1222714	A	19710217	GB 1968-1222714	19680905
FR 1602521	A	19701221	FR 1968-1602521	19680906

PRIORITY APPLN. INFO.: US 1967-666473 19670908
AB Besides gelatin, a basic mordant with >25% quaternated N units (U.S. 3,444,138; CA 71: 71464), and an **acid** filter dye (such as the oxonol dyes of U.S. 3,247, 127; CA 60: 4289h), the layers contain 25-75% of a copolymer of an alkyl acrylate with 7-20% of an ethylenic monomer containing solubilizing sulfonic ester, SO3H, or CO2H groups. Such layers adhere well to various supports, including polyester films, can be **processed** in alkaline **solns.**, release the dyes in them, and have a very low tendency to crack during aging. Thus, a mordant with 40% recurring (vinyl pyridiniumacetate) chloride units was prepared from poly(vinyl chloroacetate) and pyridine, combined with 10% **aqueous** gelatin, a **solution** of a dye mixture added and the pH adjusted to 5.9. After addition of an **aqueous solution** of a Me acrylate-Na 3-(acryloyloxy)propane-1-sulfonate copolymer, the mixture was hardened with HCHO and coated on a poly(ethylene terephthalate) support to be overcoated with a **Ag** halide emulsion.
IT **27082-75-3 28185-31-1 29438-48-0**
30968-57-1 32238-23-6
RL: USES (Uses)
(**photographic** antihalation layers containing basic mordants and)
RN 27082-75-3 CAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 3-sulfopropyl 2-propenoate sodium salt (9CI) (CA INDEX NAME)

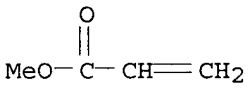
CM 1

CRN 15717-25-6
CMF C6 H10 O5 S . Na



CM 2

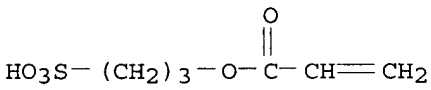
CRN 96-33-3
CMF C4 H6 O2



RN 28185-31-1 CAPLUS
CN 2-Propenoic acid, butyl ester, polymer with 3-sulfopropyl 2-propenoate (9CI) (CA INDEX NAME)

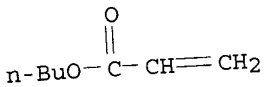
CM 1

CRN 39121-78-3
CMF C6 H10 O5 S



CM 2

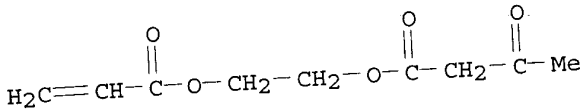
CRN 141-32-2
CMF C7 H12 O2



RN 29438-48-0 CAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with butyl 2-propenoate, 2-[(1-oxo-2-propenyl)oxy]ethyl 3-oxobutanoate and 2-propenoic acid (9CI) (CA INDEX NAME)

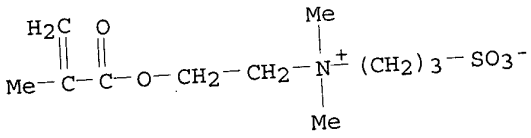
CM 1

CRN 21282-96-2
CMF C9 H12 O5



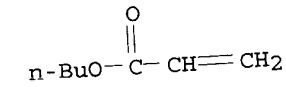
CM 2

CRN 3637-26-1
CMF C11 H21 N O5 S



CM 3

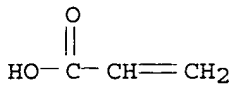
CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 79-10-7

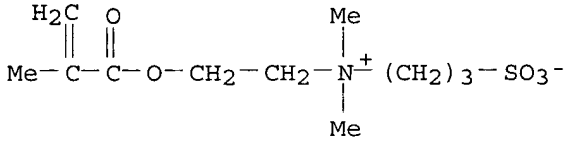
CMF C3 H4 O2



RN 30968-57-1 CAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

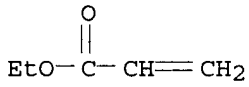
CM 1

CRN 3637-26-1
CMF C11 H21 N O5 S



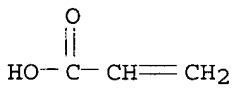
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

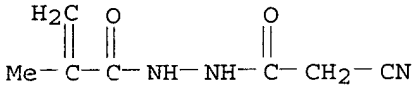


RN 32238-23-6 CAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-

3-sulfo-, inner salt, polymer with butyl 2-propenoate,
2-methyl-2-propenoic acid 2-(cyanoacetyl)hydrazide and 2-propenoic acid
(9CI) (CA INDEX NAME)

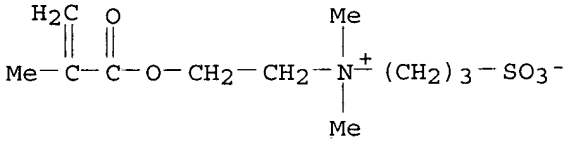
CM 1

CRN 45025-42-1
CMF C7 H9 N3 O2



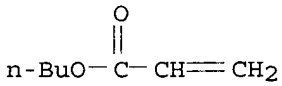
CM 2

CRN 3637-26-1
CMF C11 H21 N O5 S



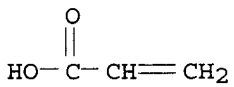
CM 3

CRN 141-32-2
CMF C7 H12 O2



CM 4

CRN 79-10-7
CMF C3 H4 O2



IC G03C
NCL 096084000A
CC **74** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST mordant antihalation layer; polyester support antihalation layer; support polyester antihalation layer
IT **Photographic** films
(antihalation interlayers for, containing basic mordants and acrylic copolymers)
IT 25085-35-2 25119-83-9 **27082-75-3 28185-31-1 29438-48-0 30968-57-1 32238-23-6**
RL: USES (Uses)
(**photographic** antihalation layers containing basic mordants and)

L15 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1970:95306 CAPLUS
DOCUMENT NUMBER: 72:95306
TITLE: **Photographic** emulsions for rapid processing
INVENTOR(S): Taber, Robert C.; Russell, William Henry
PATENT ASSIGNEE(S): Eastman Kodak Co.
SOURCE: Fr., 19 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1571047		19690913		
DE 1772720			DE	
GB 1234613			GB	
US 3647459		19720000	US	

PRIORITY APPLN. INFO.: US 19670628
US 19680201

AB Replacement of 25-75% of the gelatin in iodobromide emulsions by alkyl acrylate copolymers with a glass-transition temperature of < 20% and compatible with the gelatin, causes rapid action of the **processing solns.** and fast drying of images with superior clarity, Dmax, contrast, abrasion resistance, and with lower fog. At 38-49° the processing time is <2 min. Also, 5 mμ - 5μ inert, water-insol. particles (cellulose ester, SiO2), 3-10 mg/dm2, may be added, and as development modifiers 1-15 millimoles per mole of **Ag** halide of a nitro azole (5-nitroindazole), 5-mercaptotetrazole, or of an anthraquinone-2-sulfonate. Copolymers with <20% acrylic **acid** or sulfo ester units, to increase their water-solubility, yield particularly good results. An example is a terpolymer of Et acrylate, acrylic **acid**, and 2-(acetoacetoxy)ethyl methacrylate.
IT **26656-43-9 27175-12-8 27175-13-9**
RL: USES (Uses)
(**photographic** gelatin substitute, for rapid processing

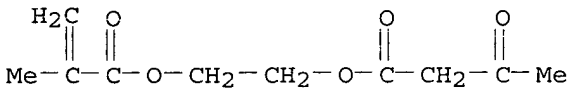
emulsions)

RN 26656-43-9 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate and 3-sulfopropyl 2-propenoate sodium salt (9CI) (CA INDEX NAME)

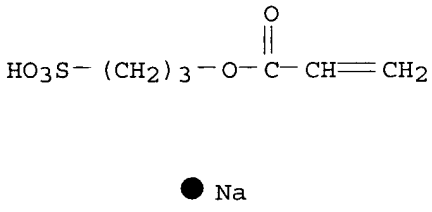
CM 1

CRN 21282-97-3
CMF C10 H14 O5



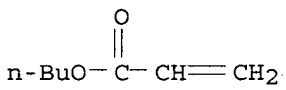
CM 2

CRN 15717-25-6
CMF C6 H10 O5 S . Na



CM 3

CRN 141-32-2
CMF C7 H12 O2



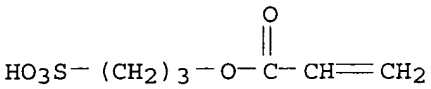
RN 27175-12-8 CAPLUS

CN Acrylic acid, ester with 3-hydroxy-1-propanesulfonic acid, polymer with ethyl acrylate (8CI) (CA INDEX NAME)

CM 1

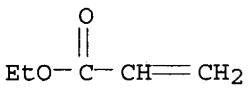
CRN 39121-78-3

CMF C6 H10 O5 S



CM 2

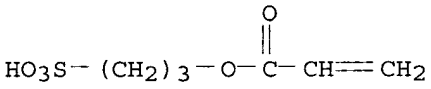
CRN 140-88-5
CMF C5 H8 O2



RN 27175-13-9 CAPLUS
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-propenoate and 3-sulfopropyl 2-propenoate (9CI) (CA INDEX NAME)

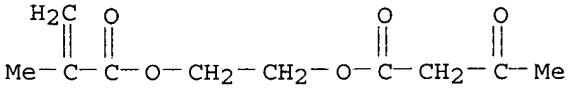
CM 1

CRN 39121-78-3
CMF C6 H10 O5 S



CM 2

CRN 21282-97-3
CMF C10 H14 O5

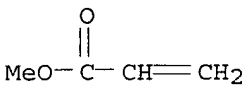


CM 3

CRN 96-33-3

KOROMA EIC1700

CMF C4 H6 O2



IC G03C
CC **74** (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST acrylates **photog** binders; binders acrylates **photog**; gelatin acrylates binders; **silver** iodobromide acrylates binders
IT **Photographic** emulsions
(alkyl acrylate copolymers in, as gelatin substitutes, for rapid processing)
IT 94-97-3 131-08-8 136-85-6 149-30-4 5401-94-5 27975-92-4
RL: USES (Uses)
(**photographic** development modifier, for rapid processing emulsions)
IT 26656-42-8 **26656-43-9 27175-12-8 27175-13-9**
27175-14-0
RL: USES (Uses)
(**photographic** gelatin substitute, for rapid processing emulsions)

=>

US 101965710CP1

Creation date: 01-03-2004
Indexing Officer: EMETCHA - EMUYE METCHA
Team: OIPEBackFileIndexing
Dossier: 10196571

Legal Date: 12-09-2003

No.	Doccode	Number of pages
1	CTMS	2

Total number of pages: 2

Remarks:

Order of re-scan issued on .....